S1745-2-u

FLORIDA MORBIDITY STATISTICS 1986

DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

BOB MARTINEZ, Governor

GREGORY L. COLER, Secretary

STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

GREGORY L. COLER
Secretary

ROBERT B. WILLIAMS
Assistant Secretary for Programs

STATE HEALTH OFFICE

CHARLES S. MAHAN, M.D.
Deputy Assistant Secretary for Health
and State Health Officer

DISEASE CONTROL

JOHN J. WITTE, M.D., M.P.H.
Assistant Health Officer

MICHAEL H. WILDER, M.D., M.S.
State Epidemiologist

WILLIAM J. BIGLER, Ph.D.
Deputy State Epidemiologist

ROBERT A. CALDER, M.D., M.S.
Medical Executive Director

KARL C. KLONTZ, M.D., M.P.H.
Medical Executive Director

MIRIAM S. BOCHNER, B.A.
Epidemiologist/Program Specialist

LAURA L. MACLAFFERTY, B.S.
Statistician

STATE HEALTH OFFICE
DISEASE CONTROL
EPIDEMIC SURVEILLANCE AND INVESTIGATION
1317 WINEWOOD BOULEVARD
TALLAHASSEE, FLORIDA 32399-0700

TABLE OF CONTENTS

Introduction v
Acknowledgements vi
Map of Florida Indicating Department of Health and Rehabilitative Services
District Boundaries and District Headquarters vii
Alphabetical List of Florida Counties with 1986 Midyear
Population Estimates and District Numbers viii

SECTION 1 - Summary of Selected Notifiable Diseases 1
Reported Cases of Selected Notifiable Diseases
by Month of Onset, Florida, 1986 3
Reported Cases of Selected Notifiable Diseases, Florida, 1977-1986 4
Reported Case Rates Per 100,000 Population for Selected
Notifiable Diseases, Florida, 1977-1986 5
Reported Cases of Notifiable Diseases of
Infrequent Occurrence, Florida, 1977-1986 6

SECTION 2 - Analysis of Selected Notifiable Diseases 7
Central Nervous System Diseases:
Encephalitis, Post-Infectious and Other 9
Encephalitis, Arthropod-Borne 12
Meningitis, Aseptic 14
Meningitis, Haemophilus influenzae type b 17
Meningitis, Meningococcal 20
Meningitis, Other Bacterial 23
Hepatitis:
Hepatitis A 26
Hepatitis B 29
Hepatitis Non-A, Non-B Associated with Blood/Blood Products 32
Hepatitis Non-A, Non-B Not Associated with Blood/Blood Products ... 35
Hepatitis Unspecified 38
Enteric Diseases:
Campylobacteriosis 42
Salmonellosis 45
Shigellosis 48
Vibrio Infections 51

SECTION 3 - Summary of Vaccine Preventable Diseases of Childhood 55
Measles (Rubeola) 57
Mumps 61
Pertussis 64
Rubella (German Measles) 68

SECTION 4 - Analysis of Animal Rabies & Zoonotic Diseases 73
Animal Rabies 75
Zoonotic Diseases 81

SECTION 5 - Summary of Acquired Immune Deficiency Syndrome 85

SECTION 6 - Summary of Sexually Transmitted Diseases 95

SECTION 7 - Summary of Tuberculosis 109

INTRODUCTION

This is the 42nd edition of the Florida Morbidity Statistics. The series begun in 1945 in order to provide a variety of users with detailed information not previously available in the State Board of Health Annual Reports. Data on the reported incidence of notifiable communicable diseases are presented in a table and figure format with narrative interpretations when appropriate. These and some unpublished records for the years 1918 through 1944 are available upon request from the Florida Department of Health and Rehabilitative Services (DHRS), State Health Office (SHO) Epidemiology Program.

Sources of Data

Data in this document are based on case reports furnished to County Public Health Units (CPHUs) by private physicians, hospitals, and others. Other sources of data include death certificates and laboratory reports which are checked routinely for previously unreported cases of notifiable diseases.

Each CPHU designates an individual responsible for collecting, tabulating, and maintaining data on reportable notifiable diseases received from physicians and hospitals on a continuing basis. These data are initially recorded on a "Reportable Disease Control Log". From this log each CPHU prepares and submits to the District Administrator and SHO Epidemiology Program summary reports on all cases of notifiable diseases reported to it during the past seven days. On the basis of these morbidity data received from CPHUs, the Epidemiology Program compiles statewide statistics and makes a weekly report of certain prescribed diseases to the Centers for Disease Control (CDC).

The population figures used in calculating the case rates for certain diseases are furnished by the Office of Planning and Budgeting, Executive Office of the Governor.

Epidemiologic Investigation

Individual case reports are verified as cases of reportable disease through investigations conducted by CPHU personnel. The CPHU director assigns those cases to be investigated to a nurse, environmental health specialist, or other appropriate personnel for follow-up. Most cases are physician-diagnosed and have appropriate laboratory verification. Individual case investigation forms are then forwarded to the Epidemiology Program for review and, in some instances, forwarded to the CDC along with investigation reports from any outbreaks.

Report Orientation

Occurrence of cases by county is usually reported by residence of the case. Reports originating from hospitals and other places outside the ill person's county of residence are credited to the county of usual residence. Sexually transmitted diseases are reported by county of residence unless residing in an institution (i.e., prison) in which case they are attributed to an institutional, 68th category.

Computerized Data Base

The Epidemiology Program collects the data submitted and consolidates it for later analysis and interpretation. The consolidated data are forwarded to the HRS Data Center for electronic data processing purposes. The CDC is then notified by telephone of reports on selected communicable diseases. A computer printout of the electronically processed data is returned to the SHO Epidemiology Program.

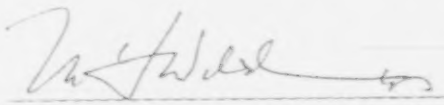
ACKNOWLEDGEMENTS

The Epidemiology Program acknowledges the important role played by Charles Hartwig, Sc.D., Director of Laboratory Services, and his staff in the Central Laboratory, the Epidemiology Research Center, and the six branch laboratories, in the prevention and control of communicable diseases. Other HRS units which contribute substantially to this overall effort are the Office of Vital Statistics and the Office of Management Systems and Computer Services.

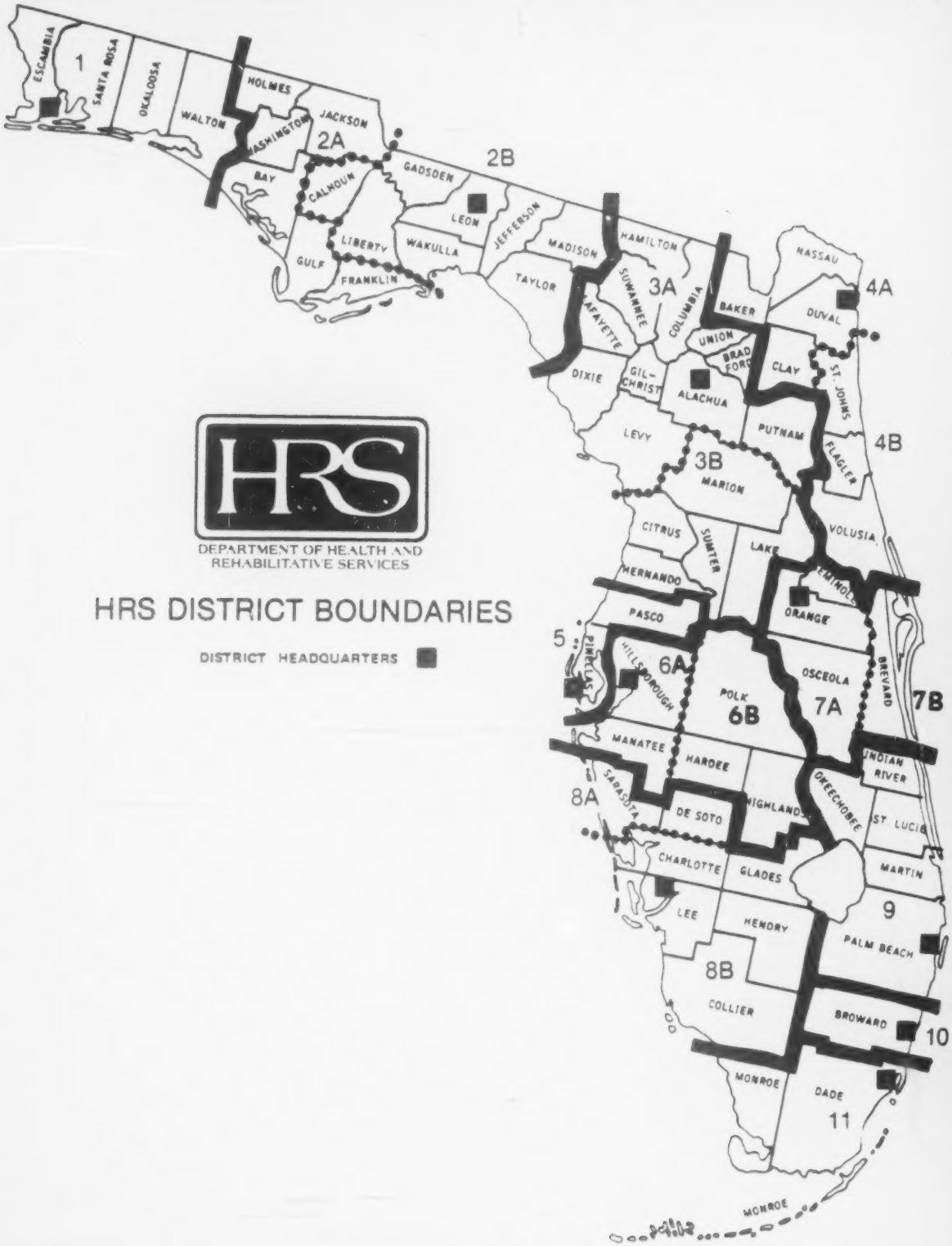
Special thanks go to Departmental employees in the Sexually Transmitted Disease, Tuberculosis, Immunization, and AIDS Programs for their efforts in the prevention, surveillance, and control of communicable diseases, especially Jack Wroten, Program Supervisor, Sexually Transmitted Disease Program, Marianne B. McEuen, M.D., Director, Tuberculosis Control Program, Henry T. Janowski, M.P.H., Program Supervisor, Immunization Program, and Joyner Sims, Ph.D., Program Administrator, AIDS Program.

Laura MacLafferty, Statistician, Communicable Disease Program, is thanked especially for her assistance in the preparation of all graphic material in this report.

Further acknowledgement is made to HRS Districts and CPHUs for their collective efforts in the statewide communicable disease morbidity surveillance and reporting system. The participation of physicians, hospitals, nurses, sanitarians, infection control nurses, epidemiology/communicable disease specialists, communicable disease report persons, and clerical staff is likewise greatly appreciated.



Michael H. Wilder, M.D., M.S., (Prev. Med.)
State Epidemiologist



HRS

DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

HRS DISTRICT BOUNDARIES

DISTRICT HEADQUARTERS ■

ALPHABETICAL LIST OF FLORIDA COUNTIES WITH 1986 MIDYEAR POPULATION ESTIMATES AND DISTRICT NUMBERS

COUNTY	POPULATION	DISTRICT
Alachua	177,209	3
Baker	17,903	4
Bay	126,754	2
Bradford	23,651	3
Brevard	360,870	7
Broward	1,155,175	10
Calhoun	9,737	2
Charlotte	84,029	8
Citrus	78,238	3
Clay	90,665	4
Collier	122,146	8
Columbia	40,657	3
Dade	1,780,093	11
DeSoto	22,429	8
Dixie	9,568	3
Duval	650,143	4
Escambia	274,960	1
Flagler	17,749	4
Franklin	8,534	2
Gadsden	45,959	2
Gilchrist	7,105	3
Glades	7,186	8
Gulf	11,643	2
Hamilton	9,273	3
Hardee	21,925	6
Hendry	23,686	8
Hernando	74,897	3
Highlands	60,739	6
Hillsborough	781,905	6
Holmes	16,246	2
Indian River	80,877	9
Jackson	42,343	2
Jefferson	11,741	2
Lafayette	4,674	3
Lake	131,319	3
Lee	280,628	8
Leon	173,090	2
Levy	23,322	3
Liberty	4,575	2
Madison	15,763	2
Manatee	177,086	6
Marion	168,636	3
Martin	84,801	9
Monroe	72,931	11
Nassau	42,221	4
Okaloosa	144,288	1
Okeechobee	26,827	9
Orange	583,378	7
Osceola	83,981	7
Palm Beach	759,706	9
Pasco	247,329	5
Pinellas	820,404	5
Polk	380,282	6
Putnam	58,869	3
St. Johns	74,104	4
St. Lucie	123,028	9
Santa Rosa	65,340	1
Sarasota	246,637	8
Seminole	244,284	7
Sumter	28,753	3
Suwannee	25,979	3
Taylor	18,337	2
Union	10,644	3
Volusia	321,867	4
Wakulla	13,736	2
Walton	26,669	1
Washington	15,373	2
STATE TOTAL*	11,744,900	

*State population increased 3.23 percent from 1985.

Population figures based on data furnished by Office of Planning and Budgeting, Executive Office of the Governor.

SECTION 1:

Summary of Selected Notifiable Diseases

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, FLORIDA, 1986

DISEASES	Totals	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
Amebiasis	41	0	2	2	2	1	0	3	6	3	2	5	2	13
Encephalitis, Post-Infectious	10	2	1	0	1	1	1	0	3	0	0	0	1	0
Encephalitis (other, excluding arthropod-borne)	33	6	3	1	1	1	5	1	3	2	4	2	3	1
Hepatitis A	1268	93	72	77	130	136	88	117	139	114	89	57	48	108
Hepatitis B	1659	137	96	107	88	141	124	112	104	128	131	132	109	250
Hepatitis NANB Asso. w/Blood or Blood Products	72	5	6	7	11	6	3	4	3	4	5	4	3	11
Hepatitis NANB Not Asso. w/Blood/Blood Products	171	13	22	10	12	17	13	17	15	14	11	12	7	8
Hepatitis, Unspecified	172	17	16	13	16	24	14	15	9	8	13	9	8	10
Legionnaires' Disease	38	3	2	5	3	2	2	3	5	2	5	1	0	5
Malaria	49	6	0	2	7	1	3	5	6	4	3	4	2	6
Measles (Rubeola)	400	10	2	0	6	23	57	38	43	55	92	58	14	2
Meningitis, Aseptic	713	36	29	41	37	45	82	80	71	83	62	49	49	49
Meningitis, Haemophilus Influenzae type b	396	48	43	31	39	31	15	21	16	37	28	37	43	7
Meningitis, Meningococcal	102	20	12	11	9	8	8	4	1	5	7	5	7	5
Meningitis, Other Bacterial	345	29	25	28	27	31	14	30	18	25	22	28	20	48
Mumps	62	5	7	1	7	4	4	4	6	7	3	6	8	0
Pertussis	82	8	7	5	12	4	6	9	10	4	3	6	5	3
Rubella (Excluding Congenital)	12	1	0	0	1	2	1	0	1	1	2	3	0	0
Salmonellosis	3160	127	104	143	122	159	234	339	341	363	394	359	206	269
Shigellosis	800	55	57	93	73	53	57	72	72	67	51	30	32	88

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES, FLORIDA, 1977-1986

DISEASES	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
Encephalitis, Post-Infectious	10	24	22	27	24	23	21	12	6	8
Encephalitis (other, excluding arthropod-borne)	33	39	55	53	74	46	59	55	92	42
Hepatitis A	1268	1028	779	961	1123	1509	2278	1883	1755	1375
Hepatitis B	1659	1728	1593	1398	1356	1512	1222	981	966	796
Hepatitis NANB Asso. w/Blood or Blood Products	72	106	98	56	75	74	51	82	+	+
Hepatitis NANB Not Asso. w/Blood/Blood Products	171	250	243	196	183	105	+	+	+	+
Hepatitis, Unspecified	172	291	248	295	477	530	788	741	583	400
Gonorrhea	67443	57647	51212	53370	62702	60354	65437	61427	60382	58843
Legionnaires' Disease	38	20	13	23	28	22	12	47	+	+
Malaria	49	38	33	31	35	49	86	32	40	23
Measles (Rubeola)	400	117	30	159	246	345	432	938	1203	308
Meningitis, Aseptic	713	592	487	588	873	673	654	319	311	258
Meningitis, Haemophilus Influenzae type b	396	423	408	333	337	N/A	N/A	N/A	N/A	N/A
Meningitis, Meningococcal	102	108	150	124	147	256	218	203	232	131
Meningitis, Other Bacterial	345	301	360	325	667	551	487	424	+	+
Mumps	62	61	47	26	48	145	195	216	318	285
Pertussis	82	75	91	57	59	78	68	51	62	75
Rubella (Excluding Congenital)	12	30	28	70	32	67	109	318	214	197
Salmonellosis	3160	2513	1859	2332	2637	2194	2031	1853	1624	1192
Shigellosis	800	1317	1032	700	585	784	927	808	857	498
Syphilis (All Stages)	9427	7969	8314	8404	7936	5971	4384	4567	4648	4543
Tuberculosis	1478	1425	1335	1457	1467	1553	1647	1628	1724	1674
Typhoid Fever	10	20	18	19	21	27	16	23	19	20

+Not Reported This Year

N/A Data Not Available

REPORTED CASE RATES PER 100,000 POPULATION FOR SELECTED NOTIFIABLE DISEASES, FLORIDA, 1977-1986

DISEASES	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
Encephalitis, Post-Infectious	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1
Encephalitis (other, excluding arthropod-borne)	0.3	0.3	0.5	0.5	0.7	0.5	0.6	0.6	1.0	0.5
Hepatitis A	10.8	9.0	7.1	9.0	10.6	14.8	23.2	20.3	19.6	15.8
Hepatitis B	14.1	15.2	14.5	13.1	12.8	14.8	12.5	10.6	10.8	9.1
Hepatitis NANB Asso. w/Blood or Blood Products	0.6	0.9	0.9	0.5	0.7	0.7	0.5	0.9	+	+
Hepatitis NANB Not Asso. w/Blood/Blood Products	1.5	2.2	2.2	1.8	1.7	1.0	+	+	+	+
Hepatitis, Unspecified	1.5	2.6	2.3	2.8	4.5	5.2	8.0	8.0	6.5	4.6
Gonorrhea	574.2	506.7	465.0	501.7	595.7	597.0	666.8	660.9	673.4	675.0
Legionnaires' Disease	0.3	0.2	0.1	0.2	0.3	0.2	0.1	0.5	+	+
Malaria	0.4	0.3	0.3	0.3	0.3	0.5	0.9	0.3	0.4	0.3
Measles (Rubeola)	3.4	1.0	0.3	1.5	2.3	3.4	4.4	10.1	13.4	3.5
Meningitis, Aseptic	6.1	5.2	4.4	5.5	8.3	6.6	6.7	3.4	3.5	3.0
Meningitis, Haemophilus Influenzae type b	3.4	3.7	3.7	3.1	3.2	N/A	N/A	N/A	N/A	N/A
Meningitis, Meningococcal	0.9	1.0	1.4	1.2	1.4	2.5	2.2	2.2	2.6	1.5
Meningitis, Other Bacterial	2.9	2.7	3.3	3.1	6.3	5.4	5.0	4.6	+	+
Mumps	0.5	0.5	0.4	0.2	0.5	1.4	2.0	2.3	3.5	3.3
Pertussis	0.7	0.7	0.8	0.5	0.6	0.8	0.7	0.5	0.7	0.9
Rubella (Excluding Congenital)	0.1	0.3	0.3	0.7	0.3	0.7	1.1	3.4	2.4	2.3
Salmonellosis	26.9	22.1	16.9	21.9	25.0	21.5	20.7	19.9	18.1	13.7
Shigellosis	6.8	11.6	9.4	6.6	5.5	7.7	9.4	8.7	9.6	5.7
Syphilis (All Stages)	80.3	70.0	75.5	79.0	75.2	59.1	44.7	49.1	51.8	52.1
Tuberculosis	12.7	12.5	12.2	13.6	13.9	15.3	16.9	18.4	20.1	19.8
Typhoid Fever	0.1	0.2	0.2	0.2	0.6	0.3	0.2	0.2	0.2	0.2

+Not Reported This Year **N/A Data Not Available**

REPORTED CASES OF NOTIFIABLE DISEASES OF INFREQUENT OCCURRENCE, FLORIDA, 1977 - 1986

DISEASE	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	Not Reported Prior to
Botulism	0	0	0	0	1	1	0	0	1	0	1961
Brucellosis	7	8	13	7	10	16	7	11	10	11	
Cholera (Group 01)	1	1	0	0	1	0	0	0	0	0	
Congenital Rubella	0	0	0	0	0	1	2	4	1	0	1971
Dengue	1	0	0	0	1	13	1	0	7	3	
Diphtheria	0	0	0	0	0	1	0	0	0	0	
Histoplasmosis	0	6	3	2	3	2	1	4	1	3	1957
Hansen's Disease (Leprosy)	3	4	8	8	8	1	4	9	2	3	
Leptospirosis	1	4	2	4	8	6	11	18	22	8	1950
Polio	2	1	0	0	0	0	0	0	0	0	
Psittacosis	3	14	3	3	1	3	5	0	3	4	1954
Reye Syndrome	5	2	6	13	9	18	21	13	7	6	
Rocky Mt. Spotted Fever	2	15	2	3	5	14	9	10	12	2	1947
Schistosomiasis	2	2	3	10	3	2	3	1	0	0	
Tetanus	3	10	7	4	2	5	4	8	10	14	
Toxoplasmosis	8	12	5	11	22	25	32	6	2	1	1964
Tularemia	0	0	0	0	1	1	0	0	2	0	
Typhus Fever (Murine)	2	0	0	0	2	1	0	1	1	0	1946

*Other Diseases of Infrequent Occurrence and Year Last Case Reported

Anthrax (1974)
Human Rabies (1948)
Smallpox (1946)

SECTION 2:

Analysis of Selected Notifiable Diseases

ENCEPHALITIS, POST-INFECTIOUS AND OTHER

In 1986, there were 43 cases of encephalitis, post-infectious and other (excluding arthropod-borne) reported in Florida, a 31.7% decrease from 1985 when 63 cases were reported. The overall case rate per 100,000 for the state population decreased slightly from last year, (0.6 in 1985 versus 0.4 in 1986).

These encephalitis cases were reported from 20 of Florida's 67 counties. The number of cases, by month of onset, indicates peak periods in January, June, and August (20 cases total).

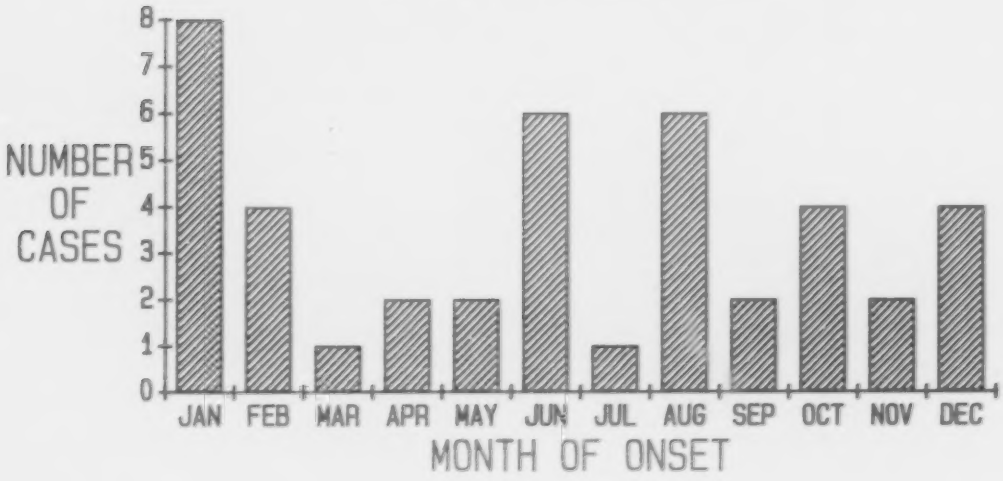
The highest age-specific incidence rate per 100,000 population was in the less than one year old age group (2 cases, 1.2 per 100,000), followed by those aged 10-14 (6 cases, 0.8 per 100,000), and 1-4 years (4 cases, 0.7 per 100,000). The case rate then decreased rapidly with increasing age.

ENCEPHALITIS, POST-INFECTIOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE) - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

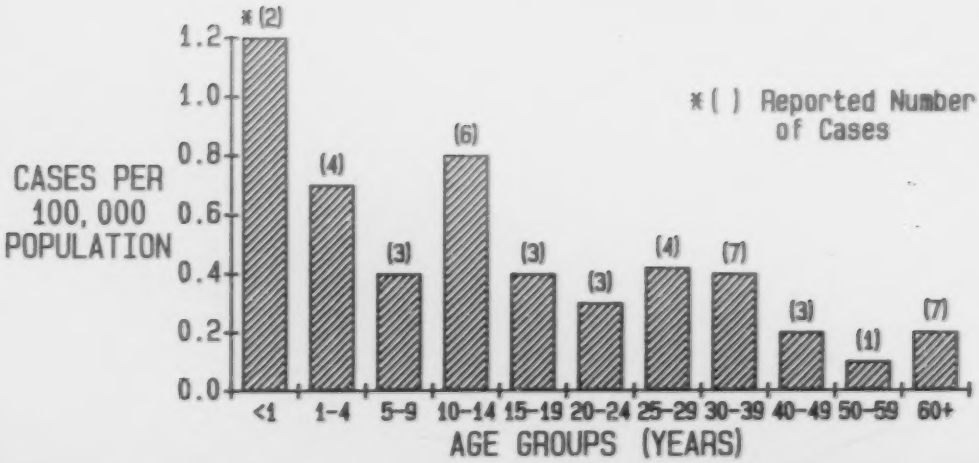
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia															0.0	0.3
	Okaloosa						1								1	0.7	0.0
	Santa Rosa															0.0	0.0
	Walton															0.0	0.0
II	Bay															0.0	4.8
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	1.5
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson						1								1	2.4	0.0
	Jefferson															0.0	0.0
	Leon															0.0	0.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	1.9
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	0.2
	Bradford															0.0	0.0
	Citrus															0.0	0.5
	Columbia													1	1	2.5	1.7
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	7.2
	Hernando															0.0	1.0
	Lafayette															0.0	0.0
	Lake															0.0	0.8
	Levy										1				1	4.3	1.5
	Marion	2	1												3	1.8	0.6
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	12.5
IV	Baker															0.0	0.0
	Clay	1	1												2	2.2	1.6
	Duval	1				1			2						4	0.6	0.5
	Flagler															0.0	0.0
	Nassau															0.0	3.4
	St. Johns															0.0	2.9
	Volusia															0.0	0.3
V	Pasco							1							1	0.4	0.7
	Pinellas								1			1			2	0.2	0.2
VI	Hardee															0.0	3.2
	Highlands															0.0	0.0
	Hillsborough				1										1	0.1	0.1
	Manatee															0.0	0.0
	Polk				1		2			2					5	1.3	2.4
VII	Brevard								1						1	0.3	0.4
	Orange		1			1	1						1		4	0.7	0.8
	Osceola															0.0	0.9
	Seminole															0.0	0.3
VIII	Charlotte								2		1				3	3.6	0.0
	Collier															0.0	0.0
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee		1												1	0.4	0.6
	Sarasota															0.0	1.5
IX	Indian River	1									1		1		3	3.7	1.3
	Martin	1													1	1.2	0.0
	Okeechobee															0.0	0.0
	Palm Beach						1					1			2	0.3	0.7
	St. Lucie															0.0	0.0
X	Broward	2		1							1		1		5	0.4	0.9
XI	Dade												1		1	0.1	0.0
	Monroe															0.0	0.0
STATE TOTAL		8	4	1	2	2	6	1	6	2	4	2	4	1	43	0.4	0.6

*1983-1985 Average rate

ENCEPHALITIS, POST-INFECTIOUS AND OTHER - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



ENCEPHALITIS, POST-INFECTIOUS AND OTHER - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



ENCEPHALITIS, ARTHROPOD-BORNE

Eastern Equine Encephalitis (EEE)

In 1986, there was one human cases of EEE in Florida. The victim was a 32-year-old black female from Malone, Florida (Jackson County). She developed fever, stiff neck, and other signs of encephalitis on June 13, followed by convulsions and deteriorating mental status. She died on June 27. The woman had no history of travel outside of Jackson County during the 2 weeks prior to onset. Her home, located in a relatively dry area of town, had intact screens on all windows and doors. However, the company with whom she was employed had an area on the property where employees could sit and eat their lunches at picnic tables. Several of these tables were located next to a ditch containing stagnant water running through the property. It was speculated that the victim may have been bitten while eating lunch.

St. Louis Encephalitis (SLE)

There were no human cases of SLE in Florida in 1986.

Arbovirus Surveillance

During 1986 a total of 8,247 sentinel chicken sera from 29 counties were tested for Hemagluttination (HI) antibodies to EEE and SLE virus by the HRS Epidemiology Research Center in Tampa. Most of these sera were collected during the summer and fall when the EEE and SLE virus are most active. EEE virus activity was initially identified in 9 counties (Putnam,Clay, Flagler, St. Johns, Volusia, Hillsborough, Manatee, Seminole, and Indian River) the last week of June. EEE virus activity continued through December and was subsequently observed in the following additional counties: Duval, Nassau, Pasco, Orange, and Osceola.

SLE virus activity was initially identified via seroconversions in Collier County in late June. By the end of December, the following counties had SLE seroconversions: Highlands, Manatee, Orange, Charlotte, Glades/Hendry, Lee, Sarasota, Indian River, Palm Beach, Martin, Broward, and Dade.

MENINGITIS, ASEPTIC

In 1986, there were 713 cases of aseptic meningitis reported in Florida, a 20.4% increase from 1985 when 592 cases were reported. The overall state case rate per 100,000 population increased from 5.2 per 100,000 in 1985 to 6.1 per 100,000 in 1986.

Aseptic meningitis cases were reported from 41 of Florida's 67 counties. The major population centers in the state accounted for most of the cases. Enteroviruses, which accounted for the majority of culture confirmed cases, are identified in most areas of the state. Enterovirus transmission occurs most frequently during late spring, summer, and fall which coincides with the peak incidence of 1986 aseptic meningitis cases during the months June through September.

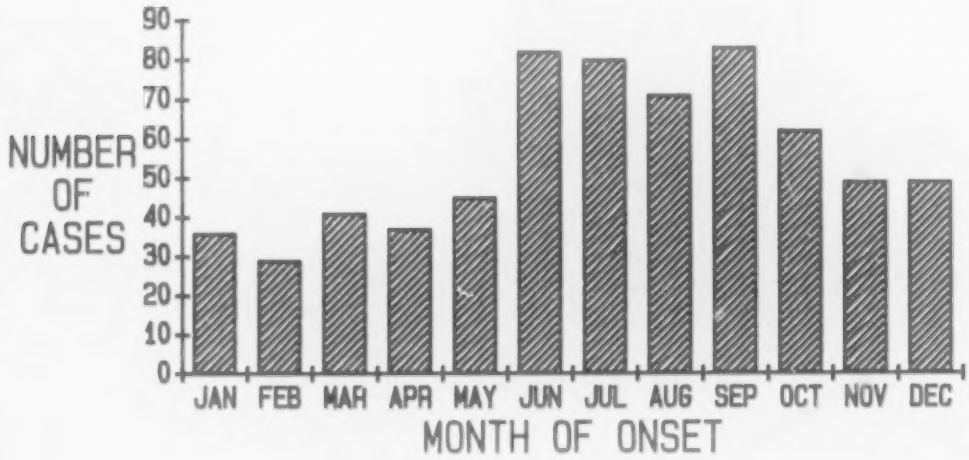
The highest age-specific incidence rate per 100,000 population was in the less than 1-year-old age group (211 cases, 128.9 per 100,000). The case rate then decreased rapidly with increasing age. The slightly elevated case rate in the age groups 1-4, 5-9, 20-24 and 25-29 may represent familial and parental associations with infants and young children.

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

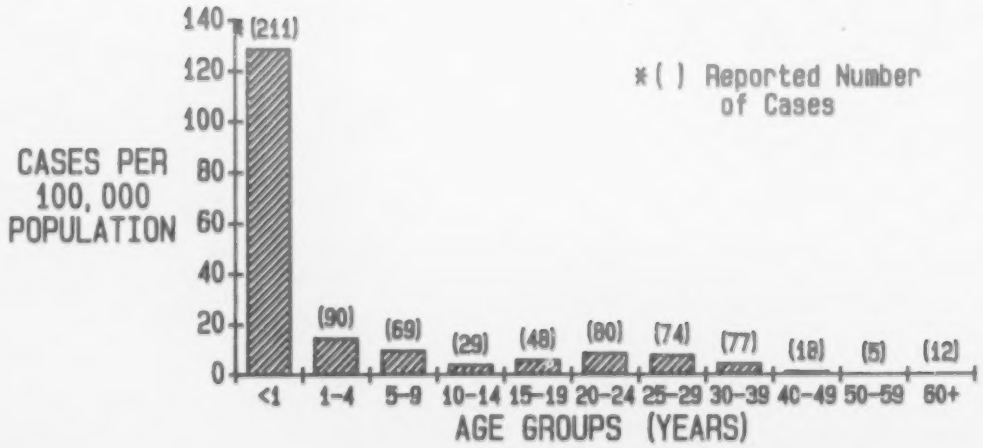
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia						1	1		1	1				4	1.5	0.8
	Okaloosa							1			2				3	2.1	0.5
	Santa Rosa		1			1	1								3	4.6	5.3
	Walton						1								1	3.7	1.3
II	Bay		1		1			1							3	2.4	1.4
	Calhoun															0.0	0.0
	Franklin															0.0	7.9
	Gadsden		1			1									2	4.4	0.7
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson	1				1	1	1		1		1	1		7	16.5	4.9
	Jefferson															0.0	2.9
	Leon		1	2						2				21	26	15.0	5.8
	Liberty															0.0	0.0
	Madison															0.0	4.3
	Taylor							2							2	10.9	3.7
	Wakulla															0.0	5.1
	Washington															0.0	0.0
III	Alachua			1		1		1	1	3	3	4	5		19	10.7	4.8
	Bradford															0.0	1.4
	Citrus								1						1	1.3	0.9
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	9.4
	Hamilton															0.0	0.0
	Hernando					1	2	1	1	1					6	8.0	1.0
	Lafayette															0.0	0.0
	Lake											2			2	1.5	1.6
	Levy															0.0	4.5
	Marion						2	1	1	2		2	1		9	5.3	3.4
	Putnam															0.0	0.6
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	3.1
IV	Baker															0.0	0.0
	Clay						1	1	1	3	1	2			9	9.9	10.3
	Duval							1							1	0.2	1.0
	Flagler															0.0	4.2
	Nassau			1					1						2	4.7	4.2
	St. Johns			1			4	1							6	8.1	9.3
	Volusia	1	1	2	1	2	2	2	3		2		2		18	5.6	6.1
V	Pasco	1			1		2	2	1	1	3		1		12	4.9	3.4
	Pinellas		2		2	2	4	8	4	6	2	1	3		34	4.1	3.9
VI	Hardee	1							1						2	9.1	7.9
	Highlands							1		1					2	3.3	2.9
	Hillsborough	7	3	7	3	9	6	14	10	13	11	5	3		91	11.6	9.8
	Manatee				1	1					1	2	1		6	3.4	9.0
	Polk	3	1	3	10	4	7	4	2	7	6		4		51	13.4	13.1
VII	Brevard					1	2	2	5	5	3	4	3		25	6.9	6.0
	Orange	2	5	3	3	5	11	11	6	5	6	4	3		64	11.0	10.0
	Osceola						1								1	1.2	3.5
	Seminole	1	2	2	1	2			1	2	1		2		14	5.7	5.0
VIII	Charlotte									1				1	2	2.4	0.0
	Collier	2				1	1	1							5	4.1	5.2
	DeSoto					1									1	4.5	7.7
	Glades															0.0	0.0
	Hendry															0.0	3.0
	Lee	1	1	2	4	5	9	2	6	9	5		3		47	16.7	3.5
	Sarasota													3	3	1.2	1.7
IX	Indian River			1		1	2	1		4		1			10	12.4	1.3
	Martin				2			4	1	1		2			10	11.8	8.3
	Okeechobee															0.0	1.4
	Palm Beach		1	5	5	5	5	3	4	11	6	8	4		57	7.5	4.0
	St. Lucie		1				1	1	1		2	1	2		9	7.3	4.6
X	Broward	8	1	4			7	2	2	1	7	8	6	23	69	6.0	4.4
XI	Dade	8	7	7	3	1	9	10	18	3		2	5	1	74	4.2	4.9
	Monroe															0.0	1.4
STATE TOTAL		36	29	41	37	45	82	80	71	83	62	49	49	49	713	6.1	4.9

*1983-1985 Average rate

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



MENINGITIS, ASEPTIC - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



MENINGITIS, HAEMOPHILUS INFLUENZAE type b

In 1986, there were 396 cases of Haemophilus influenzae type b (Hib) meningitis reported in Florida, a slight decrease from 1985, when 423 cases were reported. The overall case rate per 100,000 population for the state decreased slightly from 1985 (3.7 per 100,000) to 1986 (3.4 per 100,000).

Hib meningitis cases were reported from 47 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. The number of cases by month of onset showed lower incidence during the warmer months.

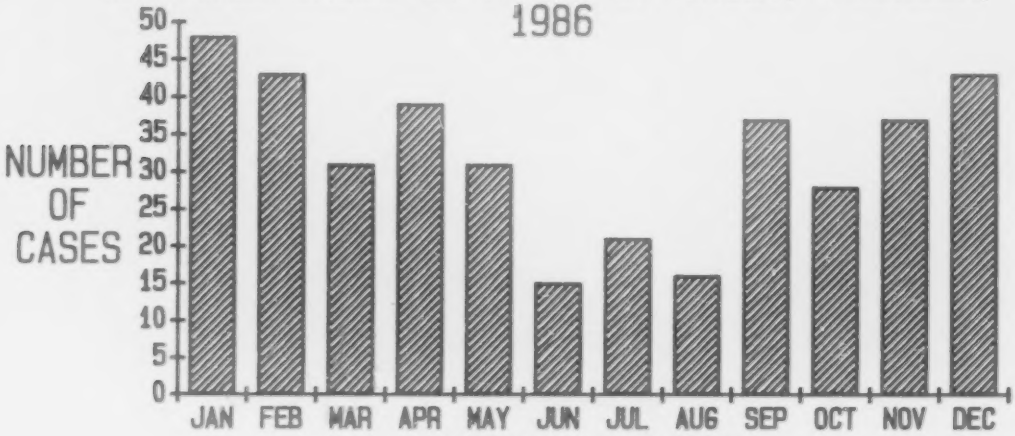
The peak age-specific incidence of reported cases occurred in the less than 1 year olds (80 cases, 48.9 per 100,000), followed by the 1-4 year olds (281 cases, 46.1 per 100,000). These two age groups accounted for 91.2% of the total cases. The low incidence rate in age groups 5-9 and above remained fairly constant.

MENINGITIS, HAEMOPHILUS INFLUENZAE type b - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

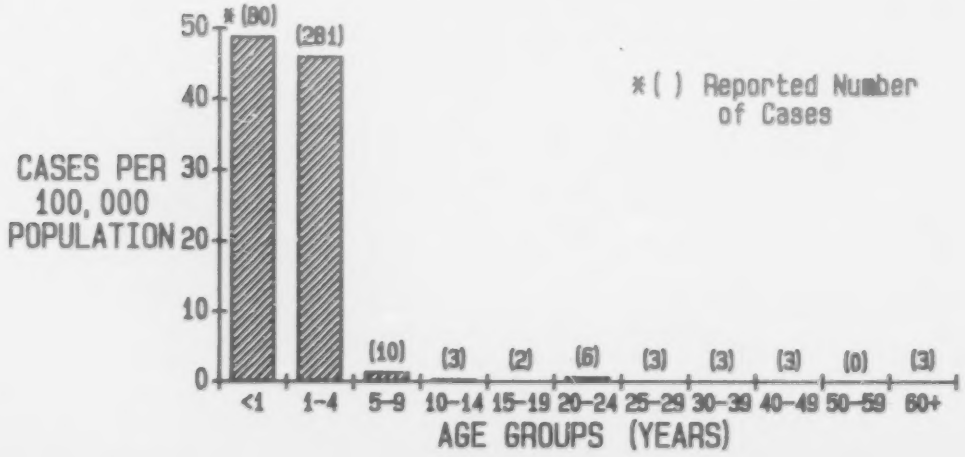
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia	1			1	1				1		1	1		6	2.2	4.4
	Okaloosa	1	1			1	1	1	1	4	1	1	1		13	9.0	3.7
	Santa Rosa															0.0	5.8
	Walton	1								1					2	7.5	2.6
II	Bay		1					1	1						3	2.4	9.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden		1		1										2	4.4	11.9
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	1.6
	Jefferson															0.0	0.0
	Leon	1	2	1		1					1				6	3.5	6.0
	Liberty															0.0	0.0
	Madison	1													1	6.3	2.1
	Taylor	1								1					2	10.9	0.0
	Wakulla				1						1				2	14.6	7.6
	Washington															0.0	0.0
III	Alachua		1			1			1		1				4	2.3	3.3
	Bradford															0.0	0.0
	Citrus										1				1	1.3	2.8
	Columbia									1		1			2	4.9	1.7
	Dixie															0.0	0.0
	Gilchrist															0.0	4.7
	Hamilton															0.0	7.2
	Hernando															0.0	1.5
	Lafayette															0.0	0.0
	Lake		2	1									1		4	6.1	4.6
	Levy															0.0	3.0
	Marion	2	1		1	1		1			1				7	4.2	7.9
	Putnam		1	2						1					4	6.8	4.7
	Sumter															0.0	8.5
	Suwannee															0.0	0.0
	Union									1					1	9.4	0.0
IV	Baker									1			1		2	11.2	1.9
	Clay	1			1	1									3	3.3	2.8
	Duval	7		7	4	4		5	2	1	4	5	2		41	6.3	5.6
	Flagler						1								1	5.6	4.2
	Nassau							1				2			3	7.1	8.4
	St. Johns		1									2			3	4.0	4.9
	Volusia	1			4			2					1		8	2.5	2.7
V	Pasco	1		1	2		1					1			6	2.4	1.7
	Pinellas	1	5	1	4	4	1	1	3	1	1	3	2		27	3.3	2.0
VI	Hardee			1											1	4.6	3.2
	Highlands															0.0	2.9
	Hillsborough	1	2	1	3	1	1		1	1		3	5		19	2.4	3.5
	Manatee		2	1		1		1					3		8	4.5	1.2
	Polk	1		1		1			1	2	1	1			8	2.1	4.7
VII	Brevard	1	3	1		1				1	2	1	2		12	3.3	1.6
	Orange	3	1	2	1	2	2		1	1	1	2	2		18	3.1	5.0
	Osceola	1			1					2					4	4.8	4.4
	Seminole		1			1		1		1	1	1	1		7	2.9	2.6
VIII	Charlotte		1												1	1.2	2.6
	Collier	1			1			1		1		3	1		8	6.5	7.0
	DeSoto												1		1	4.5	12.4
	Glades															0.0	0.0
	Hendry										1				1	4.2	5.9
	Lee	2				3	1		1		1	2	1		11	3.9	4.3
	Sarasota													2	2	0.8	2.0
IX	Indian River				1							1			2	2.5	3.9
	Martin	2		1								1	1		5	5.9	4.5
	Okeechobee									1					1	3.7	21.7
	Palm Beach	3	3	4	4	2	1	2		3	4	2	3	1	32	4.2	3.4
	St. Lucie							1							1	0.8	2.9
X	Broward	5	2	1		2	4	1	1	6	3	1	4		30	2.6	1.9
XI	Dade	9	11	5	9	3	2	2	3	5	3	2	10	4	68	3.8	4.4
	Monroe		1									1			2	2.7	2.4
STATE TOTAL		48	43	31	39	31	15	21	16	37	28	37	43	7	396	3.4	3.7

*1983-1985 Average rate

MENINGITIS, HAEMOPHILUS INFLUENZAE type b - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



MENINGITIS, HAEMOPHILUS INFLUENZAE type b - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



MENINGITIS, MENINGOCOCCAL

In 1986, 102 cases of meningitis due to Neisseria meningitidis were reported. This was an incidence rate of 0.9 cases per 100,000 population, the same as reported in 1985. The peak age-specific incidence of reported cases occurred in the less than 1 year olds (12 cases, 7.3 per 100,000) followed by the 1-4 year olds (34 cases, 5.6 per 100,000). These two age groups represented 45.1% of the total cases. The incidence rate in the older age groups remained low and fairly constant.

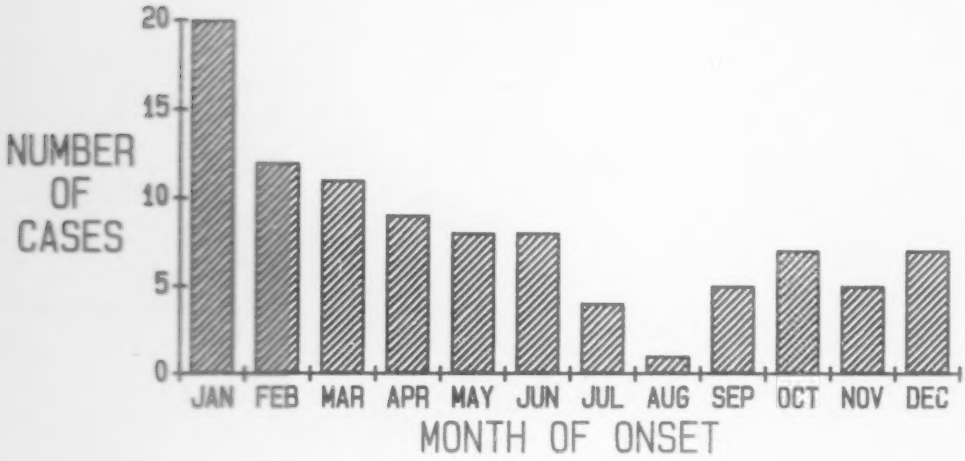
Meningococcal meningitis cases were reported from 29 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. The majority of cases occurred in January (20).

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

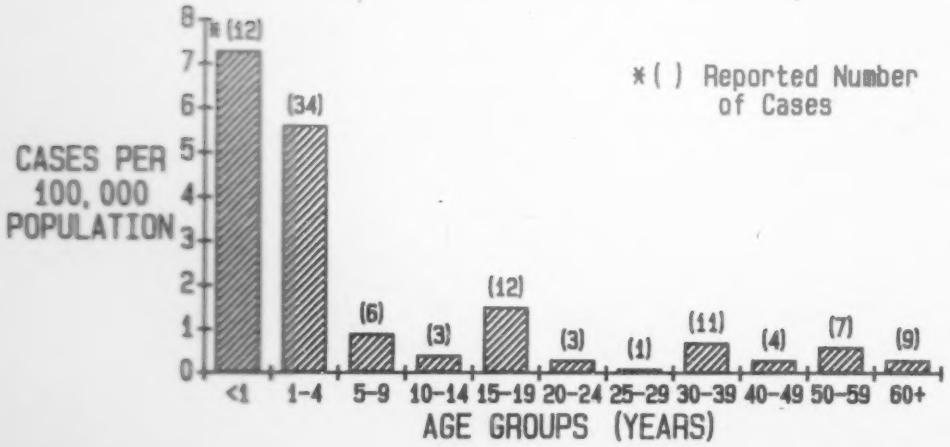
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR. * MEAN
I	Escambia															0.0	0.9
	Okaloosa															0.0	0.5
	Santa Rosa															0.0	1.1
	Walton															0.0	1.3
II	Bay															0.0	1.1
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden									1					1	2.2	0.0
	Gulf															0.0	0.0
	Holmes		1												1	6.2	2.1
	Jackson		1												1	2.4	0.0
	Jefferson															0.0	0.0
	Leon															0.0	1.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	2.5
	Washington															0.0	0.0
III	Alachua			1						1					2	1.1	0.8
	Bradford															0.0	2.8
	Citrus															0.0	0.0
	Columbia															0.0	0.0
	Dixie												1		1	10.5	7.2
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando			1				1			1				3	4.0	0.0
	Lafayette															0.0	7.4
	Lake	3													3	4.6	0.0
	Levy															0.0	1.5
	Marion	1													1	0.6	0.0
	Putnam			1								1			2	3.4	2.9
	Sumter															0.0	2.4
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker											1			1	5.6	3.8
	Clay		1												1	1.1	1.2
	Duval			1		1					1		1		4	0.6	1.0
	Flagler															0.0	0.0
	Nassau															0.0	5.9
	St. Johns	1													1	1.3	1.0
	Volusia	2					1						1		4	1.2	1.5
V	Pasco					1	1								2	0.8	2.3
	Pinellas	2			1										3	0.4	1.2
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough	1		1	2		3			1		1	1		10	1.3	0.8
	Manatee	3	1			1									5	2.8	3.7
	Polk															0.0	0.4
VII	Brevard	1		1											2	0.6	0.9
	Orange	2	3		1	2	1								9	1.5	1.7
	Osceola															0.0	1.7
	Seminole		1												1	0.4	0.4
VIII	Charlotte			1						1					2	2.4	0.0
	Collier															0.0	0.0
	DeSoto		1												1	4.5	4.6
	Glades															0.0	0.0
	Hendry			1											1	4.2	0.0
	Lee												1		1	0.4	0.9
	Sarasota										1			1	2	0.8	2.0
IX	Indian River															0.0	0.9
	Martin															0.0	1.2
	Okeechobee															0.0	1.4
	Palm Beach			1	1	1			1				1	1	6	0.8	1.1
	St. Lucie															0.0	0.0
X	Broward	2				1					1		1	2	7	0.6	1.1
XI	Dade	2	3	2	4	1	2	3		1	3	2		1	24	1.3	1.1
	Monroe															0.0	0.0
STATE TOTAL		20	12	11	9	8	8	4	1	5	7	5	7	5	102	0.9	1.1

*1983-1985 Average rate

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



MENINGITIS, MENINGOCOCCAL - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



MENINGITIS, OTHER BACTERIAL

In 1986, 345 cases of meningitis, other bacterial [i.e., Group B Streptococcus (43 cases), Listeria monocytogenes (28 cases), Streptococcus pneumonia (8 cases), and Other bacterial including Unspecified (266 cases)] were reported. This was an incidence rate of 2.9 cases per 100,000 population, a slight increase from the rate reported in 1985 (2.6). The peak age-specific incidence of reported cases occurred in the less than 1 year olds (88 cases, 53.8 per 100,000) followed by the 1-4 year olds (65 cases, 10.7 per 100,000). These two age groups represented 44.3% of the total cases reported. Nearly 70% of all reported cases of bacterial meningitis in the U.S. occur in children less than 5 years of age. The incidence rate in age groups 5 years of age and above remained low and fairly constant.

Bacterial meningitis (excluding Haemophilus influenzae type b and Neisseria meningitidis) cases were reported from 45 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. Most of the cases (although not necessarily the highest incidence rates) were accounted for by the major population centers in the state. Baker County had the highest incidence rate with 27.9 per 100,000.

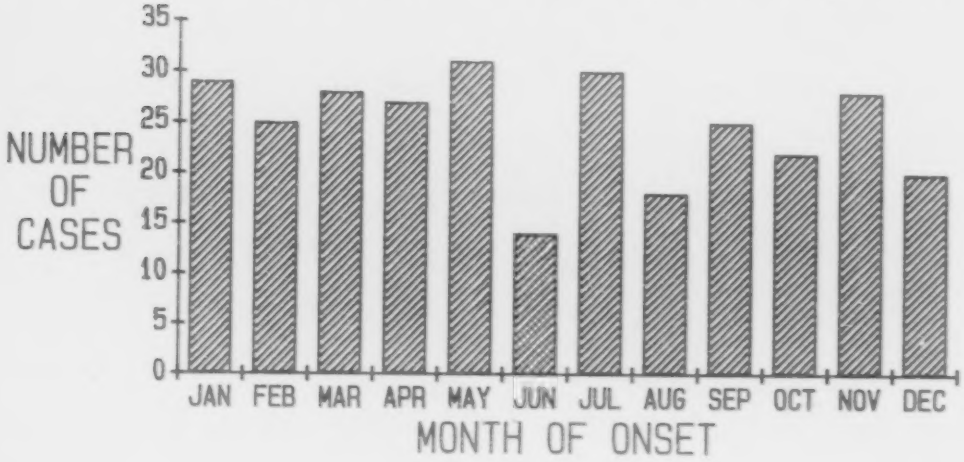
The number of reported cases by month of onset was constant throughout the year, averaging 25 cases per month, with slight drops in June (14) and August (18).

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

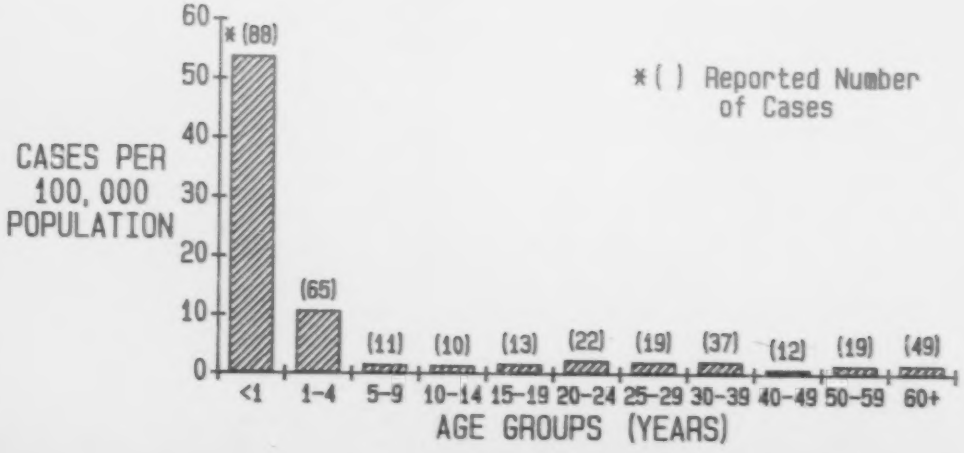
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia				1			1		1					3	1.1	1.4
	Okaloosa															0.0	1.0
	Santa Rosa															0.0	4.2
	Walton									1					1	3.7	0.0
II	Bay															0.0	5.9
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden		1		1		1	1	1	1					6	13.1	6.0
	Gulf															0.0	0.0
	Holmes								1						1	6.2	0.0
	Jackson						1								1	2.4	1.6
	Jefferson								1						1	8.5	5.8
	Leon	2		1		1	1						2	15	22	12.7	6.2
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor	1								1					2	10.9	22.4
	Wakulla															0.0	0.0
	Washington											1			1	6.5	0.0
III	Alachua	1		1				1				1			4	2.3	2.7
	Bradford					1	2								3	12.7	2.8
	Citrus		2						1	2	2				7	8.9	3.2
	Columbia			1	1	1									3	7.4	5.1
	Dixie															0.0	0.0
	Gilchrist											1			1	14.1	0.0
	Hamilton															0.0	7.2
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake	1		1	1		2	2	1			2		1	11	16.8	2.4
	Levy															0.0	1.5
	Marion			1			1	5	2	2			2	2	15	8.9	3.8
	Putnam		1			1						3		2	7	11.9	1.8
	Sumter				1						2			1	4	13.9	3.7
	Suwannee															0.0	0.0
	Union													1	1	9.4	3.1
IV	Baker		1		2					1			1		5	27.9	0.0
	Clay			1											1	1.1	1.6
	Duval	2	3	4	3	2		3	1	2	2	1		1	24	3.7	4.0
	Flagler															0.0	4.2
	Nassau				1	1	1						1		4	9.5	6.8
	St. Johns															0.0	2.9
	Volusia	1			3					1		1	1		7	2.2	4.5
V	Pasco	1			1			1							3	1.2	2.1
	Pinellas		1	1		1				1	3	1			8	1.0	1.7
VI	Hardee									1					1	4.6	0.0
	Highlands															0.0	0.6
	Hillsborough	3	1	3		3	1			1		1		1	14	1.8	4.2
	Manatee															0.0	0.4
	Polk	2	1					1		1		2	2		9	2.4	7.9
VII	Brevard		1			1	1	2			1	2			8	2.2	1.4
	Orange		2	1	6	9		1	1	2	1	1			24	4.1	5.0
	Osceola		1			1			1						3	3.6	5.7
	Seminole				1				1	1	2		2		7	2.9	2.5
VIII	Charlotte							1							1	1.2	0.9
	Collier	3	1			1		1	3		2				11	9.0	5.5
	DeSoto															0.0	4.6
	Glades															0.0	4.9
	Hendry		1												1	4.2	0.0
	Lee	3	1	4	2			2		1		1	1		15	5.3	3.7
	Sarasota					1								18	19	7.7	6.6
IX	Indian River					1	1					1	2	1	6	7.4	7.4
	Martin											1	1		2	2.4	2.5
	Okeechobee															0.0	5.4
	Palm Beach	1	2	2	2		1	1	2	2	1	5	1		20	2.6	1.6
	St. Lucie							4							4	3.3	2.6
X	Broward	2	4	3		2		2		2	4	1	3	3	26	2.3	1.8
XI	Dade	6	1	3	1	4	1	1	2	1	2	1	1	2	26	1.5	1.1
	Monroe			1								1			2	2.7	0.5
STATE TOTAL		29	25	28	27	31	14	30	18	25	22	28	20	48	345	2.9	2.8

*1983-1985 Average rate

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



MENINGITIS, OTHER BACTERIAL - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



HEPATITIS A

In 1986, 1,268 cases of hepatitis A were reported, as compared with the total number of cases reported in 1985 (1,028). The incidence in 1986 (10.8 per 100,000) increased 20% from the rate in 1985 (9.0).

The number of cases rose substantially in April to 130 (from 77 in March), peaking in August at 139. The fewest cases were seen in December (48). The general trend was a Spring/Summer increase in cases from April through August, with subsequent Fall/Winter decrease from September through December.

The bimodal distribution of cases among age groups was similar to previous years. Young adults aged 20-24 years and 25-29 years had the highest rates of illness per 100,000 population (22.6 and 22.9, respectively) as well as the 5-9 year old group which had the next highest rate (15.6). Lowest rates were reported for children less than 5 years of age (1.2) who, when infected, frequently have subclinical infection or non-specific mild illness and are probably underdiagnosed.

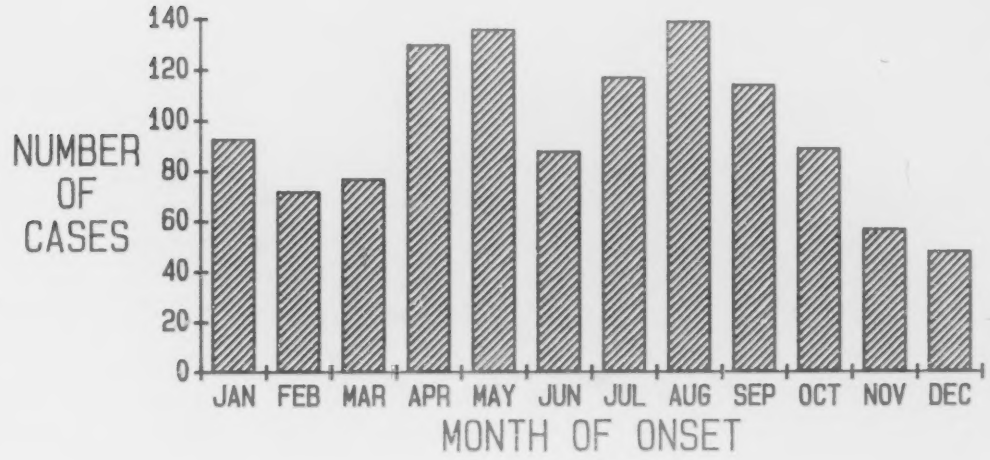
Hepatitis A infection was reported from all but 15 of Florida's 67 counties. The highest rates of infection were observed in Gilchrist (56.3 per 100,000), St. Johns (55.3 per 100,000), and DeSoto (53.5 per 100,000) counties.

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

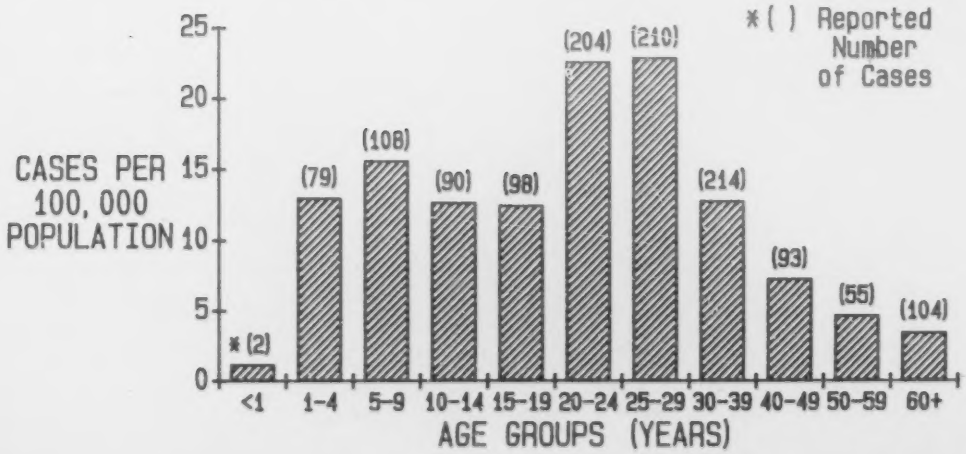
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia	2	3	5	2				1	1				2	16	5.8	2.4
	Okaloosa	2		1						1					4	2.8	4.9
	Santa Rosa								1		1				2	3.1	2.1
	Walton												1		1	3.7	0.0
II	Bay		1												1	0.8	0.3
	Calhoun															0.0	3.5
	Franklin															0.0	0.0
	Gadsden					1		1							2	4.4	16.4
	Gulf															0.0	0.0
	Holmes															0.0	4.3
	Jackson													1	1	2.4	4.1
	Jefferson															0.0	0.0
	Leon					1					2			1	4	2.3	4.0
	Liberty															0.0	0.0
	Madison															0.0	2.1
	Taylor				1										1	5.5	0.0
	Wakulla									1					1	7.3	0.0
	Washington							1	1						2	13.0	8.9
III	Alachua		2	2	1	1	2	5	2	1				1	17	9.6	8.7
	Bradford							1							1	4.2	7.1
	Citrus							1	2	3					6	7.7	3.7
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist	1					1	1	1				1		4	56.3	37.6
	Hamilton															0.0	0.0
	Hernando		2			2		1	1						6	8.0	6.0
	Lafayette															0.0	0.0
	Lake	1	2	1		1	1	1	2	2	2	1			14	10.7	14.0
	Levy	1				1									2	8.6	1.5
	Marion	6	2	2	1	1	3	3	3	1	3	2		15	42	24.9	3.4
	Putnam					1	3		1		1	1			7	11.9	12.9
	Sumter															0.0	13.4
	Suwannee								1						1	3.8	1.3
	Union															0.0	9.4
IV	Baker					1									1	5.6	0.0
	Clay	1			1				1		2				5	5.5	6.7
	Duval	10	2	9	9	9	6	13	23	29	21	7	4	9	151	23.2	5.5
	Flagler													1	1	5.6	0.0
	Nassau							1	1					1	3	7.1	2.5
	St. Johns	5	1	2	4	12	7	3	1	1	1	4			41	55.3	22.5
	Volusia	8	6	5	3	3	9	6	20	13	14	8	10	6	111	34.5	26.4
V	Pasco	9	5	10	11	5	4	8	5	6	5	4	3		75	30.3	16.0
	Pinellas	4	3		3		6	1	6	3	3		1	3	33	4.0	4.4
VI	Hardee															0.0	7.9
	Highlands	1		1			1			1			1	1	6	9.9	18.4
	Hillsborough	9	20	18	13	9	10	23	20	12	6	9	10		159	20.3	13.3
	Manatee		1	1	1	2	1		1	6	1	1	2	1	18	10.2	33.7
	Polk	1	1	1		6	2			1				2	14	3.7	12.7
VII	Brevard	1	1	2	1	3	3	2	1	1					15	4.2	3.7
	Orange	11	7	4	5	2	2	7	12	9	4	2	2	9	77	13.2	18.4
	Osceola				1	1		1	1		1	1		2	8	9.5	22.2
	Seminole	3	2	1	9	5		2	3	2	3		1	1	32	13.1	4.5
VIII	Charlotte										1		2	3	6	7.1	4.3
	Collier	2	3	2	1	1	1	12	10	7	1	1	1	3	45	36.8	10.4
	DeSoto					1			1	3	2	3		2	12	53.5	10.8
	Glades															0.0	0.0
	Hendry				1	1			2						4	16.9	20.7
	Lee					1	8	5	5	2	2	1	2		26	9.3	6.2
	Sarasota	1		1		1			1	1	3	4		23	35	14.2	10.2
IX	Indian River				1										1	1.2	2.6
	Martin									1					1	1.2	3.7
	Okeechobee					1	1							1	3	11.2	54.3
	Palm Beach	7	3	2	5	5	4	3	1	1	3	5			39	5.1	8.3
	St. Lucie	1			1			1			1		1		5	4.1	4.3
X	Broward	4	3	5	48	51	10	12	4	2	2	2	3	12	158	13.7	4.5
XI	Dade	2	2	2	7	6	2	2	4	3	4	1	4	8	47	2.6	4.4
	Monroe						1								1	1.4	9.9
STATE TOTAL		93	72	77	130	136	88	117	139	114	89	57	48	108	1268	10.8	8.4

*1983-1985 Average rate

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



HEPATITIS A - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



HEPATITIS B

In 1986, 1,659 cases of hepatitis B were reported to the state, as compared with the total number of cases reported in 1985 (1,728). The incidence in 1986 (14.1 per 100,000) decreased 7.2% from the rate in 1985 (15.2). The monthly number of cases remained fairly uniform throughout the year, averaging 106 per month.

The age groups with the highest incidences per 100,000 were the 25-29 and the 20-24 year olds (40.4 and 37.2, respectively), followed by those aged 30-39 (22.5) and 15-19 years (16.6).

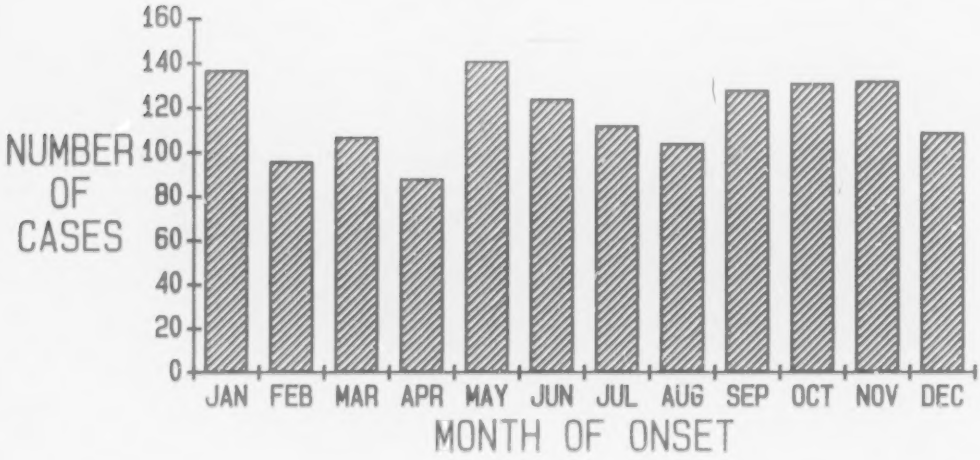
Hepatitis B infections were reported from all but 10 of Florida's 67 counties. The highest rate was observed in Liberty county (65.6 per 100,000).

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

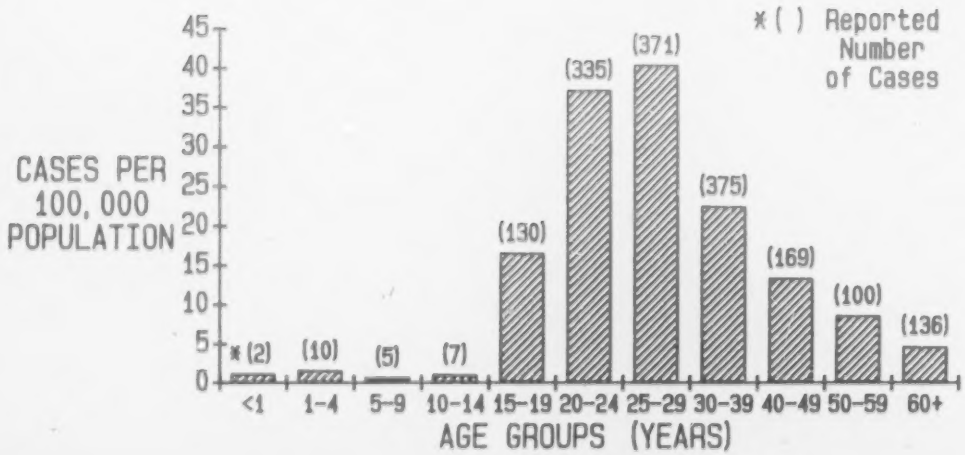
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia		1	1	1	3	4	2	1	4		2	3	4	26	9.5	9.1
	Okaloosa		2	1	1			4	1	1	4	3	2	2	21	14.6	12.3
	Santa Rosa	1				2			1						4	6.1	4.2
	Walton		1								1				2	7.5	9.2
II	Bay	1						1			1	1			4	3.2	4.8
	Calhoun															0.0	10.6
	Franklin															0.0	0.0
	Gadsden	6	3	2		1	1			1					14	30.5	34.3
	Gulf										2				2	17.2	5.9
	Holmes															0.0	4.3
	Jackson															0.0	13.1
	Jefferson															0.0	0.0
	Leon	3	1	1	1	2	2	1		3	1	3	2	7	27	15.6	11.9
	Liberty		1									1		1	3	65.6	7.4
	Madison				1		1								2	12.7	8.5
	Taylor			1				1					1		3	16.4	13.1
	Wakulla															0.0	20.3
	Washington															0.0	0.0
III	Alachua			1	2	2	1	1			1	1	1		10	5.6	5.0
	Bradford		1	1										2	4	16.9	9.9
	Citrus						1			1		3	1		6	7.7	8.3
	Columbia	2	1		1			2	1	1					8	19.7	1.7
	Dixie															0.0	14.4
	Gilchrist												1		1	14.1	0.0
	Hamilton								1						1	10.8	25.3
	Hernando	1	1			1	1	1	2			1			8	10.7	8.9
	Lafayette									1					1	21.4	0.0
	Lake	1		1	1	2	1		1	4	1	5	1	3	21	16.0	15.6
	Levy					1									1	4.3	4.5
	Marion	1		1			1	1	2	2	2	2	1	10	23	13.6	13.8
	Putnam		1							1		1		3	6	10.2	10.6
	Sumter						3			1		1	1	5	11	38.3	29.3
	Suwannee		1			2	1								4	15.4	1.3
	Union	1					1	1		1		1			5	47.0	62.6
IV	Baker	1						1	1		1				4	22.3	3.8
	Clay	1		1	1		1	1		1	1	1			8	8.8	6.3
	Duval	13	9	21	5	13	15	16	10	13	8	7	7	15	154	23.7	22.0
	Flagler															0.0	4.2
	Nassau			1		3		2						2	8	18.9	11.0
	St. Johns	8				1	2		3	4	2	2			22	29.7	52.8
	Volusia	2	4	6	1	5	4	3	8	5	6	6	3	24	77	23.9	27.9
V	Pasco	1	4	2	1	2	2	3	3	2	2	1	4		27	10.9	10.2
	Pinellas	7	5	12	6	7	5	9	3	12	8	5	9	3	91	11.1	11.7
VI	Hardee	1				1								2	4	18.2	11.0
	Highlands								1						1	1.6	0.0
	Hillsborough	14	7	10	12	11	13	6	7	7	10	15	8	4	124	15.9	14.1
	Manatee	3	2		3		4	3		2	2	3	3	6	31	17.5	22.9
	Polk	7		3	1	3	4	4	4	4	4	3	1	2	40	10.5	14.1
VII	Brevard	6	5	1	3	5	3	5	2	6	4	8	3	3	54	15.0	12.0
	Orange	9	16	5	13	20	13	11	13	6	17	15	13	16	167	28.6	27.5
	Osceola	2	2			1					1		2		8	9.5	18.7
	Seminole	3	1		4	1	2	2	2		2	3	1	3	24	9.8	18.0
VIII	Charlotte	1					2		2	1	5	1		3	15	17.9	11.1
	Collier	4	1	2		1			1	1	2	1	1	10	24	19.6	16.8
	DeSoto			1			1	2	1		3			1	9	40.1	27.8
	Glades															0.0	0.0
	Hendry					1			1	1					3	12.7	17.7
	Lee	6	4	4	3	8	5	5	2	3	7	3		6	58	20.7	26.2
	Sarasota	1				2					1	1	1	30	36	14.6	18.4
IX	Indian River			1			1		2					5	9	11.1	6.5
	Martin			2		2	1			3			2	4	14	16.5	17.7
	Okeechobee			1						1				2	4	14.9	8.1
	Palm Beach	15	8	9	7	10	10	4	8	14	10	14	18	3	130	17.1	15.5
	St. Lucie		3		1	2	2	1	2	2			3		16	13.0	14.3
X	Broward	8	4	5	9	13	14	14	12	11	16	15	10	43	174	15.1	17.6
XI	Dade	5	7	10	7	13	1	5	6	6	5	3	5	23	96	5.4	7.6
	Monroe	2			1		1				1		1	3	9	12.3	34.0
STATE TOTAL		137	96	107	88	141	124	112	104	128	131	132	109	250	1659	14.1	14.9

*1983-1985 Average rate

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



HEPATITIS B - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



HEPATITIS NON-A, NON-B ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS

In 1986, 72 cases of non-A non-B (NANB) hepatitis associated with blood or blood products were reported to the state, as compared with 106 cases reported in 1985. The incidence per 100,000 population in 1986 (0.6) decreased by 33.3% from 1985 (0.9). The number of cases per month remained fairly constant throughout the year, with the most cases seen in April. The age group with the highest incidence was the 60+ year olds (1.4 per 100,000), followed by the 50-59 year age group (1.0 per 100,000).

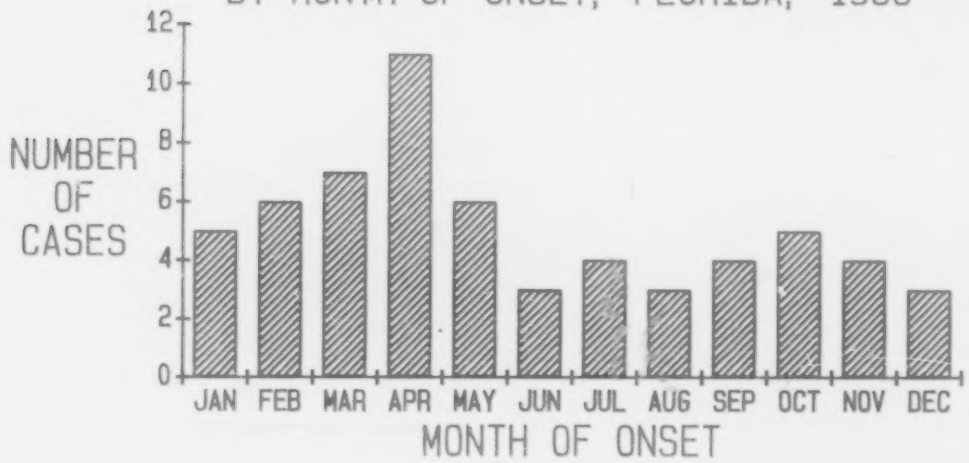
Cases of hepatitis NANB associated with blood or blood products were reported from 26 of Florida's 67 counties. The highest rate was observed in Franklin County (11.7 per 100,000).

HEPATITIS NON-A, NON-B ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

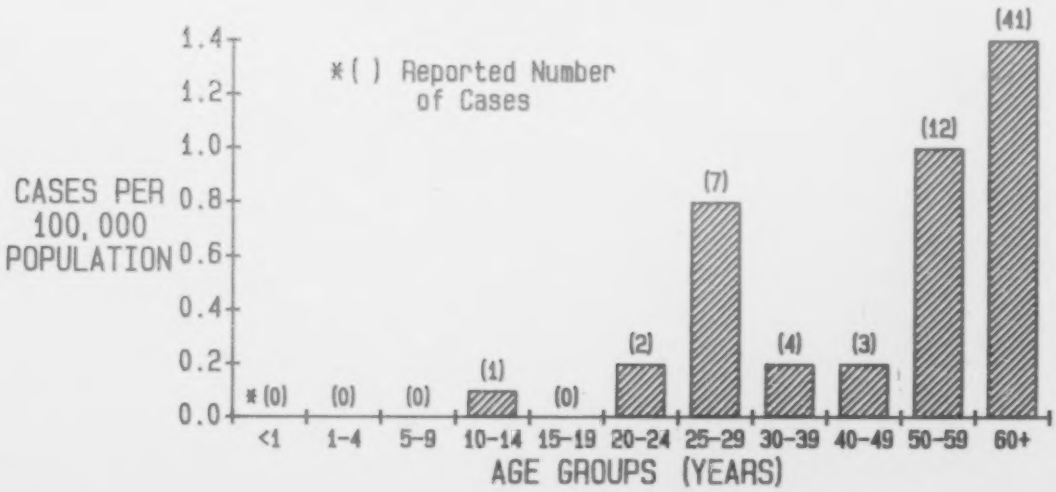
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia															0.0	0.0
	Okaloosa			1											1	0.7	0.0
	Santa Rosa															0.0	0.0
	Walton															0.0	3.9
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin													1	1	11.7	0.0
	Gadsden															0.0	1.5
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon															0.0	0.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua	1									1				2	1.1	0.8
	Bradford													1	1	4.2	0.0
	Citrus															0.0	0.5
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake											1			1	0.8	0.8
	Levy															0.0	0.0
	Marion															0.0	0.4
	Putnam															0.0	0.0
	Sumter										1				1	3.5	0.0
	Suwannee															0.0	1.3
	Union															0.0	0.0
IV	Baker															0.0	17.3
	Clay									1					1	1.1	3.5
	Duval		1		2	2				1					6	0.9	1.3
	Flagler															0.0	0.0
	Nassau		1							1					2	4.7	1.7
	St. Johns															0.0	2.0
	Volusia				2			1						1	4	1.2	1.4
V	Pasco	1				1						1			3	1.2	1.3
	Pinellas	1		1	3		1						1		7	0.9	1.4
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough	1	1	1	1		1								5	0.6	0.3
	Manatee															0.0	0.0
	Polk									1					1	0.3	0.8
VII	Brevard			1											1	0.3	0.8
	Orange							1					1		2	0.3	1.0
	Osceola															0.0	1.7
	Seminole					1		1	1	1				1	5	2.0	0.6
VIII	Charlotte															0.0	0.0
	Collier				1	1									2	1.6	2.3
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry	1													1	4.2	1.5
	Lee		1	1											2	0.7	1.6
	Sarasota													4	4	1.6	0.7
IX	Indian River								2						2	2.5	2.2
	Martin															0.0	4.5
	Okeechobee															0.0	0.0
	Palm Beach		1		1	1		1	1		2	2			9	1.2	0.7
	St. Lucie				1										1	0.8	1.7
X	Broward			1							1		1	1	4	0.3	1.8
XI	Dade		1											2	3	0.2	0.3
	Monroe															0.0	0.0
STATE TOTAL		5	6	7	11	6	3	4	3	4	5	4	3	11	72	0.6	0.9

*1983-1985 Average rate

HEPATITIS NON-A, NON-B (ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



HEPATITIS NON-A, NON-B (ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



HEPATITIS NON-A, NON-B
NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS

In 1986, 171 cases of non-A non-B (NANB) hepatitis not associated with blood or blood products were reported to the state, as compared with 250 cases reported in 1985. The incidence in 1986 (1.5 per 100,000) decreased by 31.8% from the rate in 1985 (2.2 per 100,000)..

The age groups with the highest incidence were the 20-24 year olds and the 25-29 years olds (4.1 and 3.5 per 100,000, respectively). The number of cases per month remained fairly constant, with the most cases observed in February.

Cases of hepatitis NANB not associated with blood or blood products were observed in 28 of Florida's 67 counties. The highest rates were reported from Union (9.4 per 100,000) and Wakulla (7.3 per 100,000) counties.

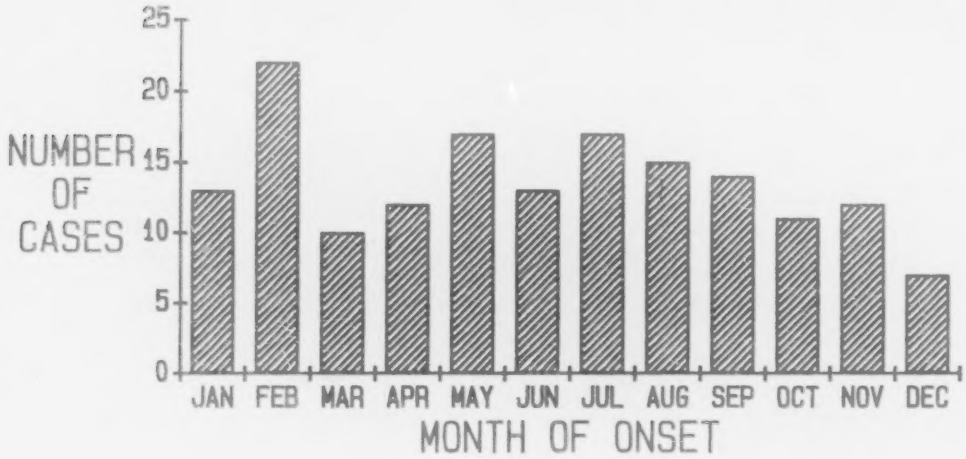
Documented non-blood transmission (i.e.,fecal/oral and water borne) of NANB hepatitis virus has not been noted in the United States. The age group peak incidence and Winter/Spring bi-seasonal peaks of these cases suggests probable undocumented blood-borne transmission. A prospective study of this question is planned.

HEPATITIS NON-A, NON-B NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS – REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

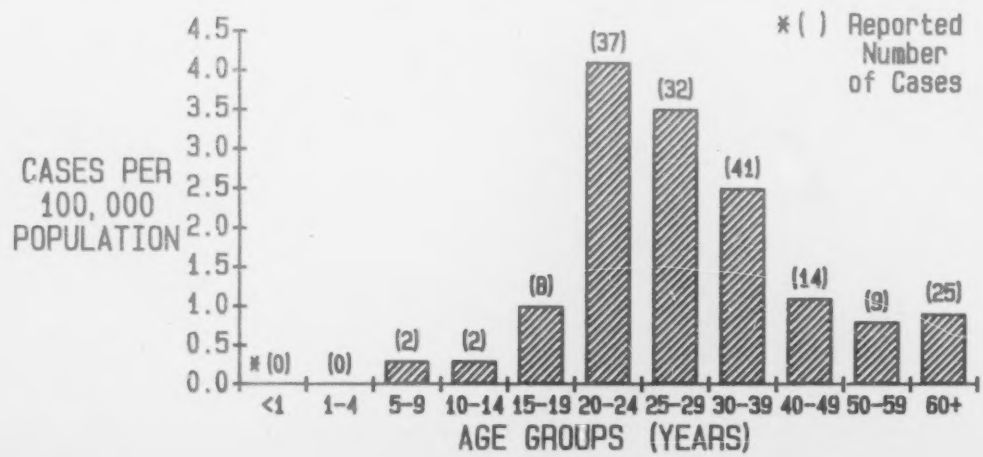
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR. * MEAN
I	Escambia				2	1	1	1	1				1	1	8	2.9	0.3
	Okaloosa															0.0	0.7
	Santa Rosa															0.0	1.1
	Walton															0.0	0.0
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon															0.0	1.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla		1												1	7.3	20.3
	Washington															0.0	0.0
III	Alachua		2	1											3	1.7	1.5
	Bradford															0.0	0.0
	Citrus	1													1	1.3	1.8
	Columbia															0.0	1.7
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake											1			1	0.8	0.0
	Levy															0.0	0.0
	Marion															0.0	1.3
	Putnam													1	1	1.7	0.0
	Sumter		1												1	3.5	2.4
	Suwannee															0.0	1.3
	Union						1								1	9.4	6.3
IV	Baker															0.0	0.0
	Clay															0.0	0.0
	Duval		1			2								2	5	0.8	0.7
	Flagler															0.0	2.1
	Nassau															0.0	3.4
	St. Johns															0.0	2.0
	Volusia	1	1	1		1		1	1	1	1			1	9	2.8	3.5
V	Pasco		1	1			1	1		1					5	2.0	3.0
	Pinellas	1	4	2	2	1	1	1	1			1		1	15	1.8	2.4
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough				2	1	1	1		1	1	1	1		9	1.2	2.8
	Manatee							1							1	0.6	2.0
	Polk															0.0	1.4
VII	Brevard									1		1			2	0.6	1.2
	Orange	4	5		2	6	3	2	2	1	5	4	1		35	6.0	11.1
	Osceola				1		2	1	1						5	6.0	4.4
	Seminole	1	1	1		1		1				1			6	2.5	2.3
VIII	Charlotte															0.0	0.0
	Collier					1									1	0.8	0.9
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee		2	2	1				1	3		2			11	3.9	1.5
	Sarasota													1	1	0.4	5.2
IX	Indian River							1							1	1.2	0.0
	Martin	1													1	1.2	2.9
	Okeechobee															0.0	0.0
	Palm Beach	3	2	2	1		3	5	4	4	4	1	3		32	4.2	4.8
	St. Lucie								1				1		2	1.6	2.6
X	Broward								1	1					2	0.2	1.2
XI	Dade		1		1	3		1	2	1				1	10	0.6	0.7
	Monroe	1													1	1.4	0.5
STATE TOTAL		13	22	10	12	17	13	17	15	14	11	12	7	8	171	1.5	2.2

*1983–1985 Average rate

HEPATITIS NON-A, NON-B (NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



HEPATITIS NON-A, NON-B (NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



HEPATITIS UNSPECIFIED

In 1986, 172 cases of hepatitis unspecified were reported to the state, as compared with 291 cases reported in 1985. The incidence in 1986 (1.5 per 100,000) decreased 42.3% from 1985 (2.6 per 100,000).

The highest age-specific incidence occurred among the 20-24 year olds, the 25-29 year olds, and the 30-39 year olds (3.6, 3.3, and 3.2 per 100,000, respectively). A Winter/Summer seasonal trend was noticed by month of onset, with most cases occurring in May.

Cases of unspecified hepatitis were reported from 27 of Florida's 67 counties. The highest rate was observed in Bradford county (21.1 per 100,000).

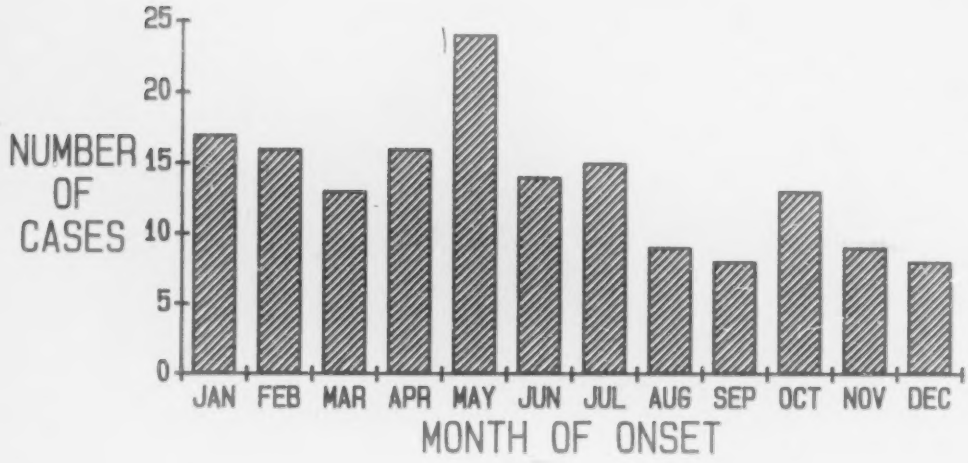
Again the seasonal and age peak incidence suggests probable blood-borne NANB hepatitis accounts for a significant number of these cases. A prospective study is planned to investigate this question.

HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

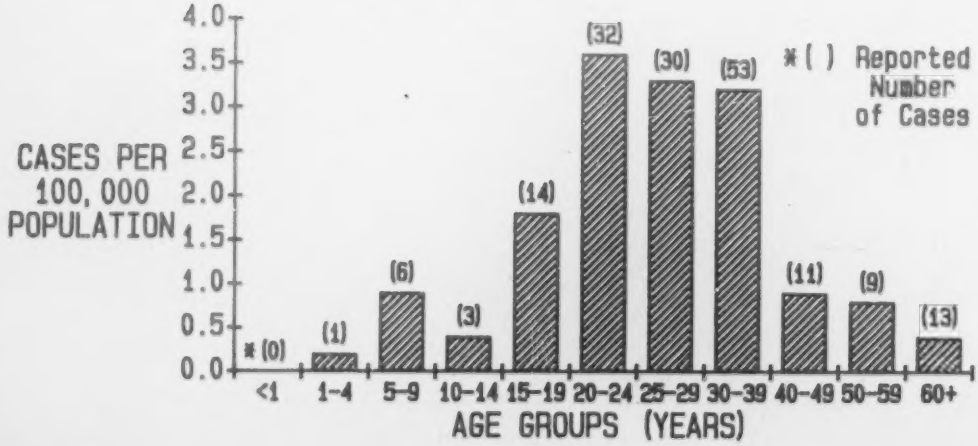
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia						1								1	0.4	0.3
	Okaloosa						1								1	0.7	0.0
	Santa Rosa															0.0	0.5
	Walton															0.0	3.9
II	Bay															0.0	2.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	3.0
	Gulf							1							1	8.6	0.0
	Holmes															0.0	0.0
	Jackson															0.0	3.3
	Jefferson															0.0	0.0
	Leon	2					1								3	1.7	4.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	5.6
	Wakulla															0.0	2.5
	Washington															0.0	0.0
III	Alachua															0.0	0.0
	Bradford		1				1	3							5	21.1	8.5
	Citrus															0.0	2.3
	Columbia						1								1	2.5	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando					1	1		1						3	4.0	0.0
	Lafayette															0.0	0.0
	Lake		3				1			1	1				6	4.6	5.1
	Levy															0.0	0.0
	Marion															0.0	2.1
	Putnam															0.0	0.0
	Sumter															0.0	1.2
	Suwannee															0.0	0.0
	Union															0.0	18.8
IV	Baker															0.0	0.0
	Clay															0.0	2.4
	Duval	3			3			1	1	1					9	1.4	1.7
	Flagler															0.0	0.0
	Nassau	1										1			2	4.7	1.7
	St. Johns															0.0	1.0
	Volusia	1		1	1	1		1	1	1					7	2.2	2.0
V	Pasco	1				1		1			3	1			7	2.8	1.6
	Pinellas		3	1		2	2	2			2		2		14	1.7	1.5
VI	Hardee															0.0	6.3
	Highlands															0.0	0.0
	Hillsborough	3	4	2	2		1	1		1			1		15	1.9	3.0
	Manatee	1	1	1	1	2									6	3.4	4.3
	Polk					1				1	3	1		1	7	1.8	9.6
VII	Brevard					2							1		3	0.8	0.2
	Orange	1	1	1	1	1				2		2			9	1.5	6.0
	Osceola			1											1	1.2	0.0
	Seminole	1		2	1							1			5	2.0	1.5
VIII	Charlotte															0.0	0.0
	Collier	1													1	0.8	3.5
	DeSoto															0.0	3.1
	Glades															0.0	0.0
	Hendry															0.0	1.5
	Lee							1	2						3	1.1	1.5
	Sarasota													1	1	0.4	6.0
IX	Indian River															0.0	5.7
	Martin															0.0	2.5
	Okeechobee															0.0	0.0
	Palm Beach	1			1	1					2	3	3	1	12	1.6	0.8
	St. Lucie					2									2	1.6	0.0
X	Broward		3	3	5	10	3	1	2		2		1	7	37	3.2	4.9
XI	Dade	1		1	1		1	3	2	1					10	0.6	0.8
	Monroe															0.0	1.4
STATE TOTAL		17	16	13	16	24	14	15	9	8	13	9	8	10	172	1.5	2.4

*1983-1985 Average rate

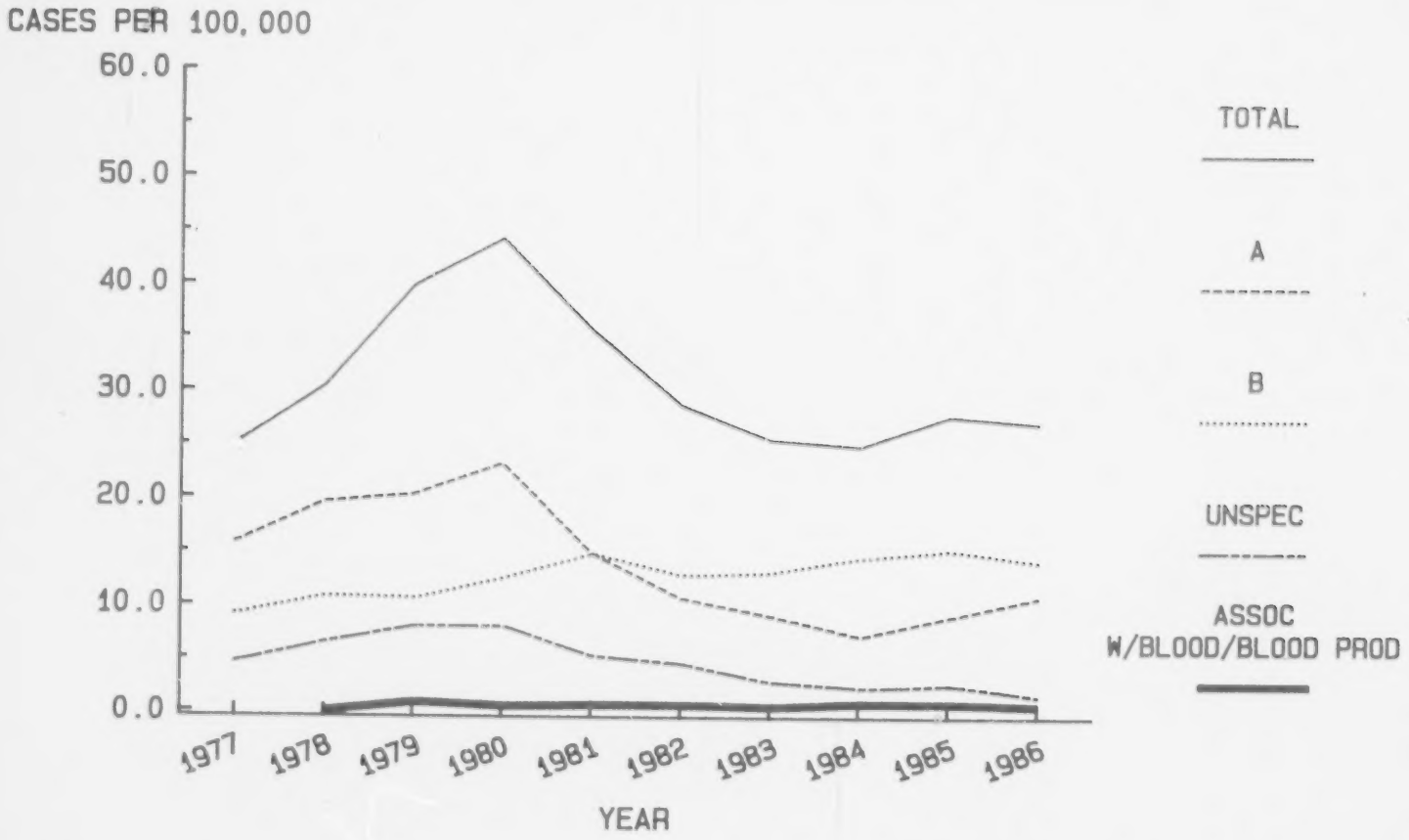
HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



HEPATITIS UNSPECIFIED - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



HEPATITIS-REPORTED CASE RATES BY YEAR
FLORIDA, 1977-1986



CAMPYLOBACTERIOSIS

In 1986, 1,543 cases of campylobacteriosis were reported to the state. The incidence per 100,000 population was 13.1. This represents a decrease of 11% over the 1985 incidence (14.7).

The highest age-specific incidence rate per 100,000 population was in those aged 1-4 years (37.9), followed by the less than 1 year old age group (28.1). A second, smaller peak is noted in the 20-24 year old (22.1) and 25-29 year old (23.9) age groups. Rates for other age groups remained significantly lower.

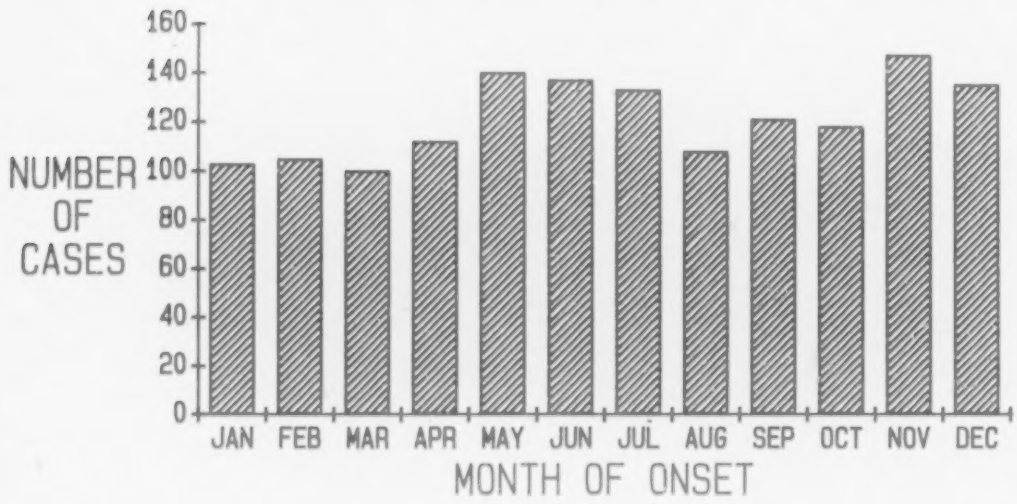
The number of reported cases by month of onset was highest during the period May through July, and again during November. Cases of campylobacteriosis were reported from all but 16 of Florida's 67 counties. The highest rates were observed in Taylor (60.0 per 100,000), Martin (59.0 per 100,000), Leon (51.4 per 100,000), and Wakulla (51.0 per 100,000) counties.

CAMPYLOBACTERIOSIS – REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

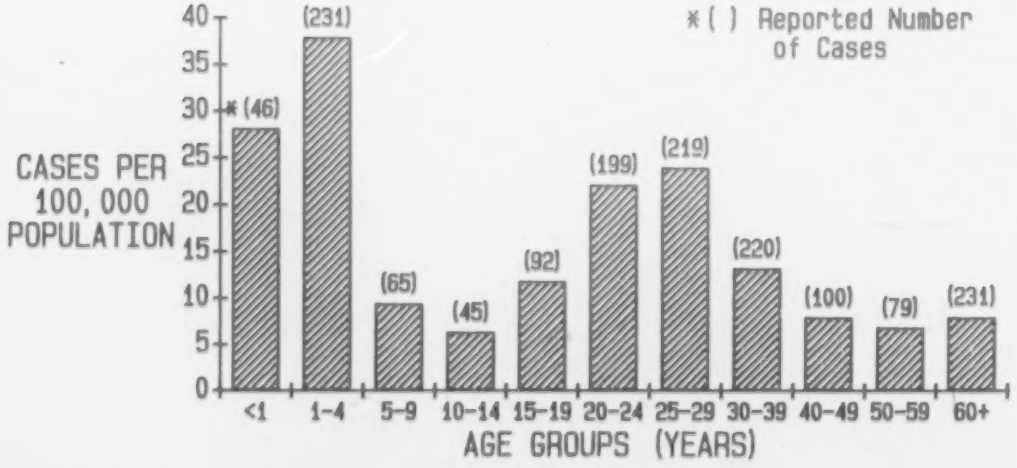
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia	3	6	1		3	2	2	2	4	3	3	3	3	35	12.7	6.1
	Okaloosa					1	3			1	1				6	4.2	2.2
	Santa Rosa			3	2	1		1	2		1	2	2		14	21.4	11.6
	Walton															0.0	0.0
II	Bay		1		2	1									4	3.2	4.2
	Calhoun					1								2	3	30.8	7.1
	Franklin															0.0	0.0
	Gadsden	1			1	1				1					4	8.7	10.4
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	8.7
	Leon	8	5	7	13	4	6	6	8	4	8	11	7	2	89	51.4	60.6
	Liberty	1											1		2	43.7	14.7
	Madison															0.0	0.0
	Taylor		3	1		1	1	1	1	1	2				11	60.0	7.5
	Wakulla		1							1				5	7	51.0	15.2
	Washington					1					1				2	13.0	0.0
III	Alachua	1	3	2	4	3	8	8	4	3	5	9		2	52	29.3	40.9
	Bradford									1				2	3	12.7	0.0
	Citrus							1							1	1.3	2.8
	Columbia	1	1	5	3				2	2	3	3			20	49.2	36.4
	Dixie						1				1				2	20.9	0.0
	Gilchrist						1								1	14.1	18.8
	Hamilton															0.0	14.5
	Hernando															0.0	0.0
	Lafayette				1					1					2	42.8	7.4
	Lake	2	1			3							1		7	5.3	6.5
	Levy						1				1				2	8.6	10.4
	Marion		1	2	1	1	2	2	1	2	3	2	6	13	36	21.3	27.6
	Putnam		4	3	1		2	2		5	1	2	5		25	42.5	33.5
	Sumter															0.0	3.7
	Suwannee															0.0	0.0
	Union								1						1	9.4	18.8
IV	Baker		1												1	5.6	0.0
	Clay	2	1	5	1		1			2			2		14	15.4	18.5
	Duval	2		2	3	10	10	2	5	6	4	10	6	6	66	10.2	7.4
	Flagler													1	1	5.6	0.0
	Nassau															0.0	2.5
	St. Johns			1			1								2	2.7	16.6
	Volusia	1	3	6	2		2	4	3	1		1		1	24	7.5	10.1
V	Pasco	4	1	3	1	1	2	2	1	1	4	2			22	8.9	7.3
	Pinellas	3	7	6	4	13	9	4	4	4	8	8	5	2	77	9.4	7.3
VI	Hardee								1					1	2	9.1	6.3
	Highlands															0.0	1.7
	Hillsborough	5	4	8	3	9	8	10	4	9	3	6	2		71	9.1	11.4
	Manatee		1				1			1		2	2		7	4.0	4.7
	Polk	4	3	1	3	4	2	7		7	4	4	5	1	45	11.8	15.7
VII	Brevard				1			1				2			4	1.1	2.1
	Orange	8	13	6	8	10	6	9	6	13	9	5	8		101	17.3	22.9
	Osceola		1	1		2	2	1	2	3			2		14	16.7	11.3
	Seminole	1		2	4	6	4	4	1	2	4	6	2	1	37	15.1	8.6
VIII	Charlotte	2			2					3					7	8.3	10.7
	Collier	3	4	2	2	5	5	6	4	7	6	4	6		54	44.2	38.6
	DeSoto															0.0	4.6
	Glades															0.0	0.0
	Hendry								1						1	4.2	1.5
	Lee	2	5	4	5	3	3	1	1		3	4	1		32	11.4	8.9
	Sarasota	1												9	10	4.1	8.8
IX	Indian River							1							1	1.2	3.9
	Martin	2	3	3	5	3	6	6	7	1	4	5	3	2	50	59.0	70.6
	Okeechobee	1												1	2	7.5	8.1
	Palm Beach	20	17	10	17	17	16	21	18	12	23	19	27	2	219	28.8	27.1
	St. Lucie	1	1	1					1	1		8	1		14	11.4	13.8
X	Broward	8	5	8	9	15	16	12	8	11	7	16	22	11	148	12.8	14.9
XI	Dade	16	9	7	14	21	16	19	20	11	9	13	16	17	188	10.6	9.6
	Monroe															0.0	1.9
STATE TOTAL		103	105	100	112	140	137	133	108	121	118	147	135	84	1543	13.1	13.4

*1983-1985 Average rate

CAMPYLOBACTERIOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



CAMPYLOBACTERIOSIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



SALMONELLOSIS

In 1986, 3,160 cases of salmonellosis were reported to the state. This represents an increase from the total number of cases reported in 1984 (2,513). The incidence in 1986 (26.9 per 100,000) was 21.7% higher than the rate in 1985 (22.1 per 100,000). There was a dramatic Spring through Fall seasonal increase in cases beginning in May (159) and peaking in October (394). The least number of cases occurred in February (104).

The highest age-specific incidence per 100,000 population was in the less than 1 year old age group (371.5) followed by those aged 1-4 (170.4). Incidence then decreased rapidly with increasing age.

Salmonellosis was reported from all but 6 of Florida's 67 counties. The highest rates per 100,000 population were observed in DeSoto (115.9), Columbia (88.5), and Leon (66.4) counties.

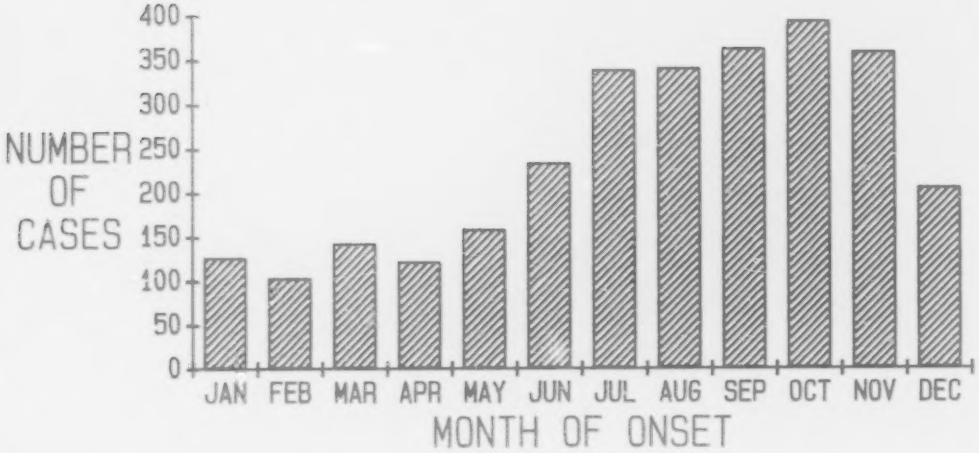
Usually food/water-borne, this disease serves as a marker for inadequate sanitary practices in food preparation (i.e., "too warm or not hot enough"), either in the home or food service industry.

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

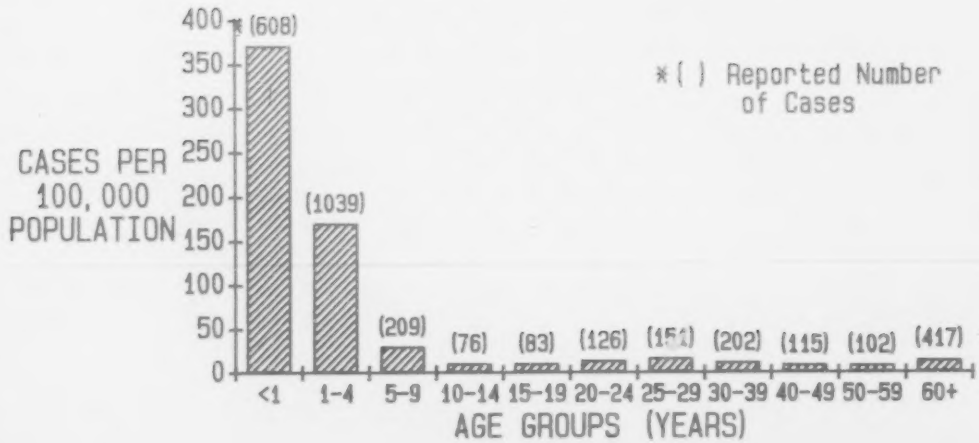
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia		3	4	2	5	5	11	6	10	8	3	3	2	62	22.5	20.1
	Okaloosa	1		2		1	1	5	8	9	14	1	3		45	31.2	6.4
	Santa Rosa		1	1	1	2	2	2	2	2	2	5	1		21	32.1	15.8
	Walton	2					1	2		1					6	22.5	22.3
II	Bay	2	1	6	2	3	6	9	10	3	14	7	3	3	69	54.4	50.9
	Calhoun		1											3	4	41.1	77.6
	Franklin															0.0	0.0
	Gadsden					1	1		2	2	1				7	15.2	29.1
	Gulf															0.0	5.9
	Holmes															0.0	0.0
	Jackson	1													1	2.4	12.3
	Jefferson															0.0	14.4
	Leon	2	1	3	4	6	8	9	8	18	16	15	6	19	115	66.4	64.9
	Liberty	1													1	21.9	59.0
	Madison		1	3				1							5	31.7	19.2
	Taylor		2		1	3	1	3	1	1	1		1		14	76.3	35.5
	Wakulla						1			2	5	1		1	10	72.8	71.1
	Washington								1	1		1			3	19.5	20.0
III	Alachua	9	1	5	2	2	10	14	6	18	7	3	3	25	105	59.3	36.7
	Bradford									1	1			5	7	29.6	7.1
	Citrus	1				1	1	2					1	2	8	10.2	15.3
	Columbia	3	2		1	1	1	7	4	7	6	3	1		36	88.5	28.0
	Dixie						1								1	10.5	10.8
	Gilchrist							2						1	3	42.2	9.4
	Hamilton												1		1	10.8	18.1
	Hernando	2	1	1					2	1	1	1		2	11	14.7	14.4
	Lafayette					1									1	21.4	37.2
	Lake	1	2	1	1	1	1	2	1	1	8	2	1	6	28	42.5	19.6
	Levy															0.0	22.3
	Marion	2	1	3	3	1	6	8	11	4	7	8	1	20	75	44.5	26.6
	Putnam		1			1	3	2	8	1	3	4	4	2	29	49.3	51.8
	Sumter	3	1						2	2		1	2	3	14	48.7	75.7
	Suwannee								1						1	3.8	3.9
	Union									1					1	9.4	15.7
IV	Baker		1				1				1				3	16.8	25.0
	Clay				1	1	5	1	7	2	3	4	5		29	32.0	25.6
	Duval	11	6	8	9	8	21	17	21	23	36	21	15	11	207	31.8	25.1
	Flagler					1		1	1					6	9	50.7	10.5
	Nassau							3	3			2			8	18.9	26.2
	St. Johns					1		3	1	2	2	3	1		13	17.5	21.0
	Volusia		4	3	5	11	12	22	28	16	10	9	7	6	133	41.3	37.9
V	Pasco	1	5	3	4	4	4	6	9	2	3	8	2		51	20.6	17.7
	Pinellas	4	4	3	4	12	14	15	7	14	20	14	9		120	14.6	10.2
VI	Hardee			1				2		1					4	18.2	20.5
	Highlands						1		1						2	3.3	9.8
	Hillsborough	10	8	7	7	11	17	18	12	21	25	19	18		173	22.1	12.8
	Manatee	2	1	3	1	5	2	2	2	10	4	5	2	6	45	25.4	19.8
	Polk	10	6	7	12	6	9	17	12	22	28	24	8	13	174	45.8	44.8
VII	Brevard	5	1		3	5	7	17	13	14	12	15	14		106	29.4	21.4
	Orange	8	8	8	11	12	16	21	26	25	27	24	13	3	202	34.6	26.8
	Osceola	2	1	1	1	2	3	1	5	3	3	7	3	5	37	44.1	32.7
	Seminole	3	1	3	2	2	11	15	9	15	16	14	7	3	101	41.3	24.4
VIII	Charlotte			1		1	3	4	5	8	11	6	3	4	46	54.7	27.7
	Collier	1	3	7	5	4	4	4	6	5	6	5	4	1	55	45.0	32.2
	DeSoto	1	1			1	2	1	1	3	3	2	4	7	26	115.9	77.3
	Glades															0.0	24.3
	Hendry			1					2	4	2		3		12	50.7	31.0
	Lee	1	4	3	2	4	5	6	10	9	9	5	7	1	66	23.5	15.3
	Sarasota		1	1		2			1	1	4	51	7	47	115	46.6	17.0
IX	Indian River				1		1	2	2	1	2	2		3	14	17.3	10.4
	Martin	2	3		1	1	1	1		5	5	2	3	5	29	34.2	34.3
	Okeechobee	1				1			1		1			1	5	18.6	46.1
	Palm Beach	14	10	7	12	11	15	28	25	28	22	15	19	2	208	27.4	22.5
	St. Lucie	2			1	1	2	6	3	6	3	4	1		29	23.6	14.6
X	Broward	10	5	18	7	7	20	20	27	18	26	33	11	16	218	18.9	14.4
XI	Dade	9	2	28	16	16	9	27	27	20	14	9	7	35	229	12.9	9.0
	Monroe			1					1		2	1	2		7	9.6	2.8
STATE TOTAL		127	104	143	122	159	234	339	341	363	394	359	206	269	3160	26.9	20.3

*1983-1985 Average rate

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



SALMONELLOSIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



SHIGELLOSIS

In 1986, 800 cases of shigellosis were reported to the state. This represents a decrease from the 1,317 cases reported in 1985. The incidence in 1986 (6.8 per 100,000) decreased by 41.4% from the rate in 1985 (11.6).

The seasonal trend was bimodal peaking in March/April and July/August.

Children aged 1-4 had the highest reported rate of illness per 100,000 population (54.1), which represents a 56.5% decrease from the 1985 rate (124.3). This is the first annual decrease in incidence in this age group (62.1 in 1983 and 104.7 1984) in the last 3 years. The next highest rate was observed in the 5-9 year old age group (17.1). Incidence was relatively low for the remaining age groups.

Shigellosis cases were reported from all but 24 of Florida's 67 counties. The highest rate per 100,000 population was observed in Desoto (227.4) county, for the second year in a row. This is probably due to an outbreak that occurred in September.

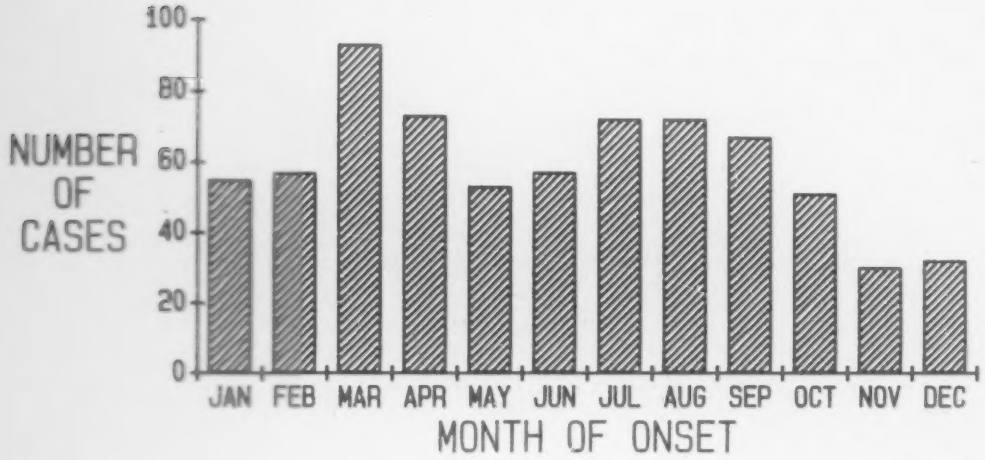
Usually spread person to person via fecal/oral route, this disease serves as a marker for day care crowding and or inadequate personal hygiene facilities/practices.

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

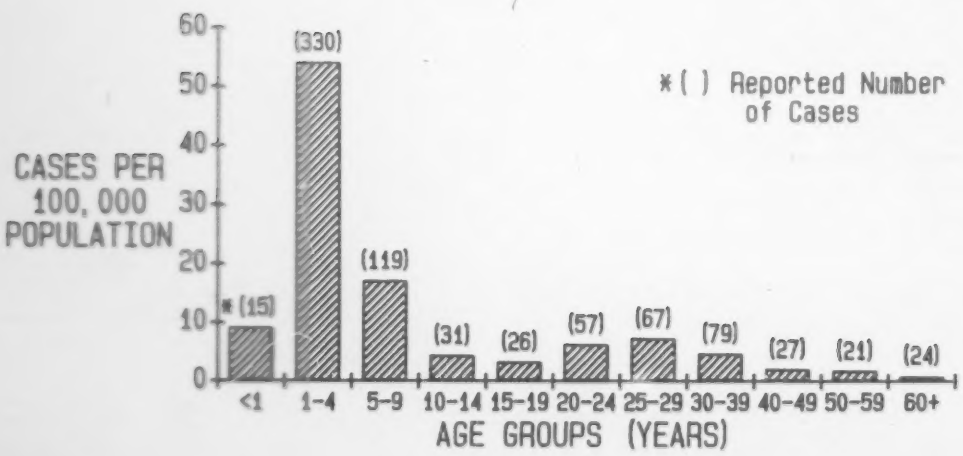
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia					3					1	1		1	6	2.2	1.4
	Okaloosa		1	1			1		1						4	2.8	0.2
	Santa Rosa															0.0	0.0
	Walton							1							1	3.7	0.0
II	Bay				1			1					2		4	3.2	8.2
	Calhoun															0.0	3.5
	Franklin															0.0	0.0
	Gadsden			1	3		3	1							8	17.4	8.2
	Gulf															0.0	0.0
	Holmes						1								1	6.2	0.0
	Jackson											1			1	2.4	18.9
	Jefferson															0.0	5.8
	Leon	2	16	37	10	2		1	1	1	3	1		2	76	43.9	33.0
	Liberty															0.0	0.0
	Madison															0.0	17.1
	Taylor															0.0	18.7
	Wakulla		2												2	14.6	40.6
	Washington							1							1	6.5	0.0
III	Alachua	1		1	13	1	8	3						12	39	22.0	43.1
	Bradford															0.0	8.5
	Citrus	1													1	1.3	1.8
	Columbia	1										1			2	4.9	10.2
	Dixie															0.0	3.6
	Gilchrist															0.0	70.5
	Hamilton															0.0	0.0
	Hernando															0.0	2.0
	Lafayette															0.0	14.9
	Lake				1	1				1	2	1		1	7	10.7	10.5
	Levy													1	1	4.3	7.4
	Marion							1				1		5	7	4.2	24.2
	Putnam							2	3	3	3	2	1		14	23.8	0.0
	Sumter	1							1						2	7.0	2.4
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	15.4
	Clay															0.0	4.7
	Duval	1		1	2	4	2	2	4	2	1			3	22	3.4	11.5
	Flagler															0.0	0.0
	Nassau															0.0	2.5
	St. Johns															0.0	2.0
	Volusia	1						2	1	1	2	1	1		9	2.8	2.6
V	Pasco		1			2		4							7	2.8	12.2
	Pinellas			1	1				7	3	1	1			14	1.7	2.7
VI	Hardee					1			1						1	4.6	22.1
	Highlands											1			1	1.6	1.1
	Hillsborough	3	2	1	9	5	9	11	4	3	3	5	5		60	7.7	11.4
	Manatee									1			2		3	1.7	3.7
	Polk	8	16	28	8	7	4	3	4	5	8	3	5	11	110	28.9	49.0
VII	Brevard	2	1	2	2					4	1				12	3.3	3.2
	Orange	2	2	5	5	4	8	6	7	1	6	4	1		51	8.7	14.3
	Osceola	2			1								1		4	4.8	49.3
	Seminole	2	1						2				2		7	2.9	7.2
VIII	Charlotte															0.0	49.9
	Collier	2			2	1	2	2			3		1	3	16	13.1	13.3
	DeSoto							1	2	21	5	1		21	51	227.4	83.4
	Glades															0.0	0.0
	Hendry							2							2	8.4	0.0
	Lee	1		1		1							1		4	1.4	3.3
	Sarasota													1	1	0.4	1.7
IX	Indian River					3					1		1	2	7	8.7	0.9
	Martin	2						4		1				2	9	10.6	14.9
	Okeechobee			2				3					2	1	8	29.8	24.4
	Palm Beach	10	4	2	7	10	11	2	24	9	3	4	1	2	89	11.7	14.1
	St. Lucie		1			1			1	1					4	3.3	3.4
X	Broward	9	6	2	3	2	4	9	4	4	7		3	13	66	5.7	9.2
XI	Dade	4	4	8	5	6	4	10	5	6	1	2	3	7	65	3.7	6.2
	Monroe															0.0	0.9
STATE TOTAL		55	57	93	73	53	57	72	72	67	51	30	32	88	800	6.8	10.8

*1983-1985 Averate rate

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



SHIGELLOSIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



VIBRIO INFECTIONS

In 1986, there was a total of 57 reported vibrio infections, including Vibrio parahaemolyticus (16 cases), Vibrio cholerae non-01 (15), Vibrio vulnificus (11), Vibrio mimicus (5), Vibrio alginolyticus (3), Vibrio fluvialis (3), Vibrio hollisae (3), and Vibrio cholerae 01 (1).

The median age of patients was 36 years. Sixty-eight percent of patients were male. The county reporting the most infections was Leon (15), followed by Hillsborough (10). The month with the peak number of cases was April (8), followed by May and March (7 each). Sixty-seven percent of the cases were associated with raw oyster consumption, and nineteen percent with wounds.

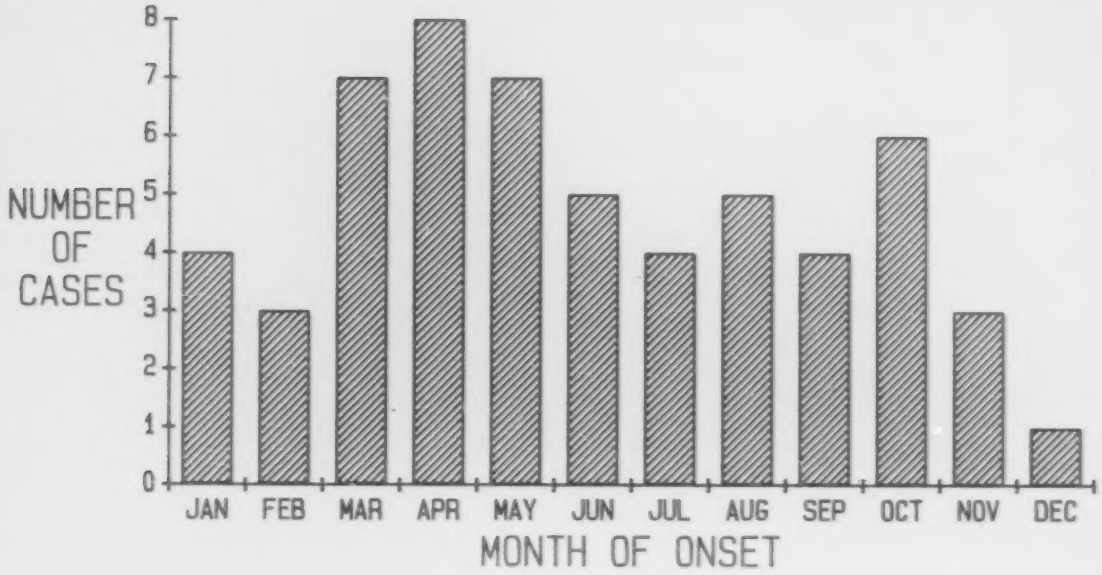
The case fatality rate for patients with Vibrio vulnificus infection was thirty-six perrcent, and forty-five percent had underlying liver disease.

VIBRIO INFECTIONS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

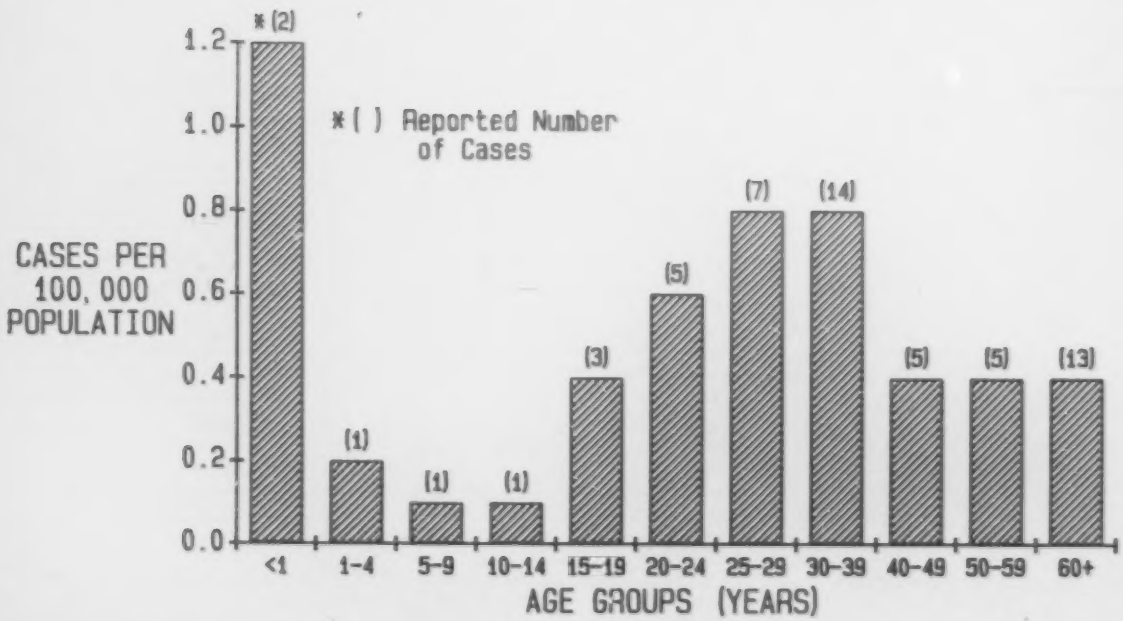
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia			1		1	1			1	1				5	1.8	—
	Okaloosa				1				1						2	1.4	—
	Santa Rosa															0.0	—
	Walton															0.0	—
II	Bay							1							1	0.8	—
	Calhoun															0.0	—
	Franklin															0.0	—
	Gadsden			1											1	2.2	—
	Gulf															0.0	—
	Holmes															0.0	—
	Jackson															0.0	—
	Jefferson															0.0	—
	Leon	3	1	1	3	1		1		1	3	1			15	8.7	—
	Liberty															0.0	—
	Madison															0.0	—
	Taylor												1		1	5.5	—
	Wakulla			2											2	14.6	—
	Washington															0.0	—
III	Alachua															0.0	—
	Bradford															0.0	—
	Citrus															0.0	—
	Columbia															0.0	—
	Dixie															0.0	—
	Gilchrist															0.0	—
	Hamilton															0.0	—
	Hernando															0.0	—
	Lafayette															0.0	—
	Lake									1					1	0.8	—
	Levy															0.0	—
	Marion															0.0	—
	Putnam															0.0	—
	Sumter							1							1	3.5	—
	Suwannee															0.0	—
	Union															0.0	—
IV	Baker															0.0	—
	Clay			1					1						2	2.2	—
	Duval					1			1						2	0.3	—
	Flagler															0.0	—
	Nassau															0.0	—
	St. Johns															0.0	—
	Volusia										1	1			2	0.6	—
V	Pasco									1					1	0.4	—
	Pinellas	1		1	1		1								4	0.5	—
VI	Hardee															0.0	—
	Highlands															0.0	—
	Hillsborough				2	3	3	1			1				10	1.3	—
	Manatee		1												1	0.6	—
	Polk				1	1									2	0.5	—
VII	Brevard															0.0	—
	Orange															0.0	—
	Osceola															0.0	—
	Seminole															0.0	—
VIII	Charlotte															0.0	—
	Collier															0.0	—
	DeSoto															0.0	—
	Glades															0.0	—
	Hendry															0.0	—
	Lee															0.0	—
	Sarasota															0.0	—
IX	Indian River															0.0	—
	Martin															0.0	—
	Okeechobee															0.0	—
	Palm Beach		1												1	0.1	
	St. Lucie											1			1	0.8	—
X	Broward								1						1	0.1	—
XI	Dade								1						1	0.1	—
	Monroe															0.0	—
STATE TOTAL		4	3	7	8	7	5	4	5	4	6	3	1	0	57	0.5	—

* Not Available

VIBRIO INFECTIONS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



VIBRIO INFECTIONS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



VIBRIO INFECTIONS - Reported laboratory confirmed cases, by county, Florida, 1986

COUNTY	Vibrio Alginolyticus	Vibrio Cholerae 01	Vibrio Cholera Non-01	Vibrio Fluvialis	Vibrio Hollisae	Vibrio Mimicus	Vibrio Parahaemolyticus	Vibrio Vulnificus
Alachua								
Baker								
Bay			1					
Bradford								
Brevard								
Broward								1
Calhoun								
Charlotte								
Citrus								
Clay			1					1
Collier								
Columbia								
Dade		1						
DeSoto								
Dixie								
Duval							1	1
Escambia							2	3
Flagler								
Franklin								
Gadsden							1	
Gilchrist								
Glades								
Gulf								
Hamilton								
Hardee								
Hendry								
Hernando								
Highlands								
Hillsborough	3		1	2	2		2	
Holmes								
Indian River								
Jackson								
Jefferson								
Lafayette								
Lake							1	
Lee								
Leon			6		1	4	4	
Levy								
Liberty								
Madison								
Manatee			1					
Marion								
Martin								
Monroe								
Nassau								
Okaloosa			1					1
Okeechobee								
Orange								
Osceola								
Palm Beach							1	
Pasco			1					
Pinellas			1	1			1	1
Polk								2
Putnam								
St. Johns								
St. Lucie							1	
Santa Rosa								
Sarasota								
Seminole								
Sumter								1
Suwannee								
Taylor						1		
Union								
Volusia							2	
Wakulla			2					
Walton								
Washington								
STATE TOTAL	3	1	15	3	3	5	16	11

SECTION 3:

Summary of Vaccine Preventable Diseases of Childhood

Prepared by Immunization Program
Henry T. Janowski, M.P.H., Program Supervisor

MEASLES (RUBEOLA)

In 1986, 400 cases of measles were reported to the state, which represents a 242% increase from the total number of cases reported in 1985 (117). The case rate in 1986 (3.4 per 100,000) increased 230% from the rate in 1985 (1.03 per 100,000).

The greatest number of cases, 262 (65.5% of the state total), was reported in Dade County. Seventy-five percent of the Dade cases were reported during September (53 cases), October (92 cases) and November (53 cases) from an extended outbreak that lasted through the year. Orange County reported 81 cases from April through August with 44 cases (54.3%) reported in June.

Statewide, children aged 1-4 (215 cases) had the highest incidence of illness (35.3 per 100,000). The 15-19 year old age group contributed 84 cases (10.8 per 100,000) followed by the 5-9 year old age group contributing 38 cases (5.5 per 100,000).

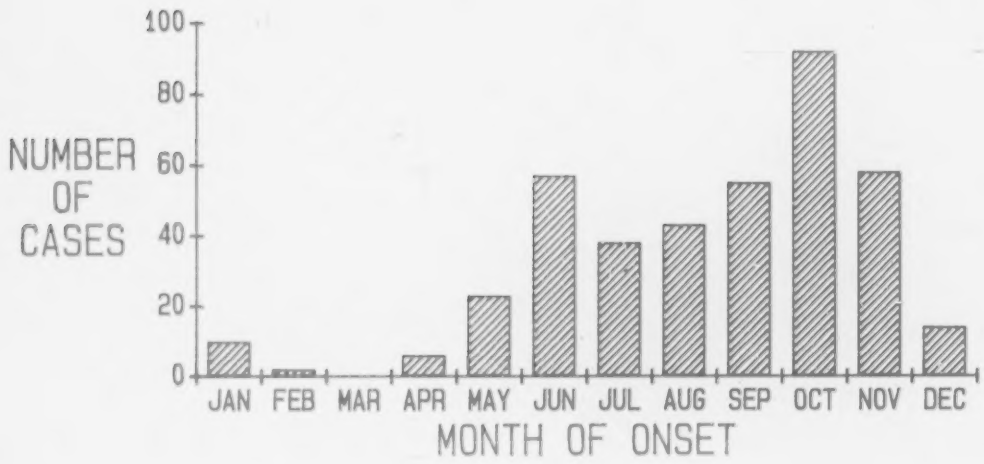
There were five major outbreaks in Florida this year. The one in Dade County, which occurred predominantly in preschool children, revolved around a hospital emergency room. Two outbreaks occurred in Orange County, the first beginning in a high school and the second at a naval base. An outbreak in Duval County, starting at a junior high school, rapidly spread to Clay and St. Johns counties before it was quelled. An outbreak in Leon County at Florida State University was crucial in establishing a measles/rubella policy for all nine public universities. Florida State University became the first college in the nation to establish stringent exclusion and outbreak control measures in subduing this outbreak.

MEASLES (RUBEOLA) - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

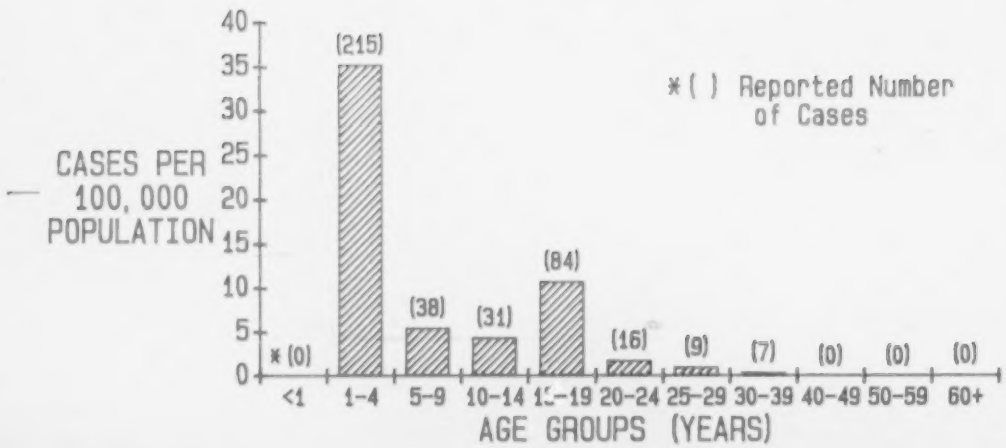
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.0
	Santa Rosa															0.0	0.0
	Walton															0.0	0.0
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon	6	1												7	4.0	0.2
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua	1													1	0.6	3.5
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	106.8
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	7.2
	Hernando				1										1	1.3	1.0
	Lafayette															0.0	0.0
	Lake															0.0	0.0
	Levy															0.0	0.0
	Marion															0.0	1.3
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	3.9
	Union															0.0	12.5
IV	Baker															0.0	3.8
	Clay							13	1						14	15.4	0.0
	Duval					5	5								10	1.5	0.0
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns						1	6							7	9.4	0.0
	Volusia															0.0	0.0
V	Pasco															0.0	0.7
	Pinellas															0.0	0.1
VI	Hardee															0.0	3.2
	Highlands															0.0	0.0
	Hillsborough				1				1						2	0.3	0.9
	Manatee															0.0	0.0
	Polk															0.0	0.5
VII	Brevard															0.0	0.0
	Orange				3	18	44	4	11					1	81	13.9	1.5
	Osceola							1	1						2	2.4	0.0
	Seminole						5	1							6	2.5	2.6
VIII	Charlotte															0.0	0.0
	Collier															0.0	0.0
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee															0.0	0.0
	Sarasota															0.0	0.0
IX	Indian River															0.0	0.0
	Martin															0.0	1.2
	Okeechobee															0.0	0.0
	Palm Beach									1		5			6	0.8	0.1
	St. Lucie															0.0	0.0
X	Broward									1					1	0.1	0.1
XI	Dade	3	1		1		2	13	29	53	92	53	14	1	262	14.7	0.3
	Monroe															0.0	0.0
STATE TOTAL		10	2	0	6	23	57	38	43	55	92	58	14	2	400	3.4	0.8

*1983-1985 Averate rate

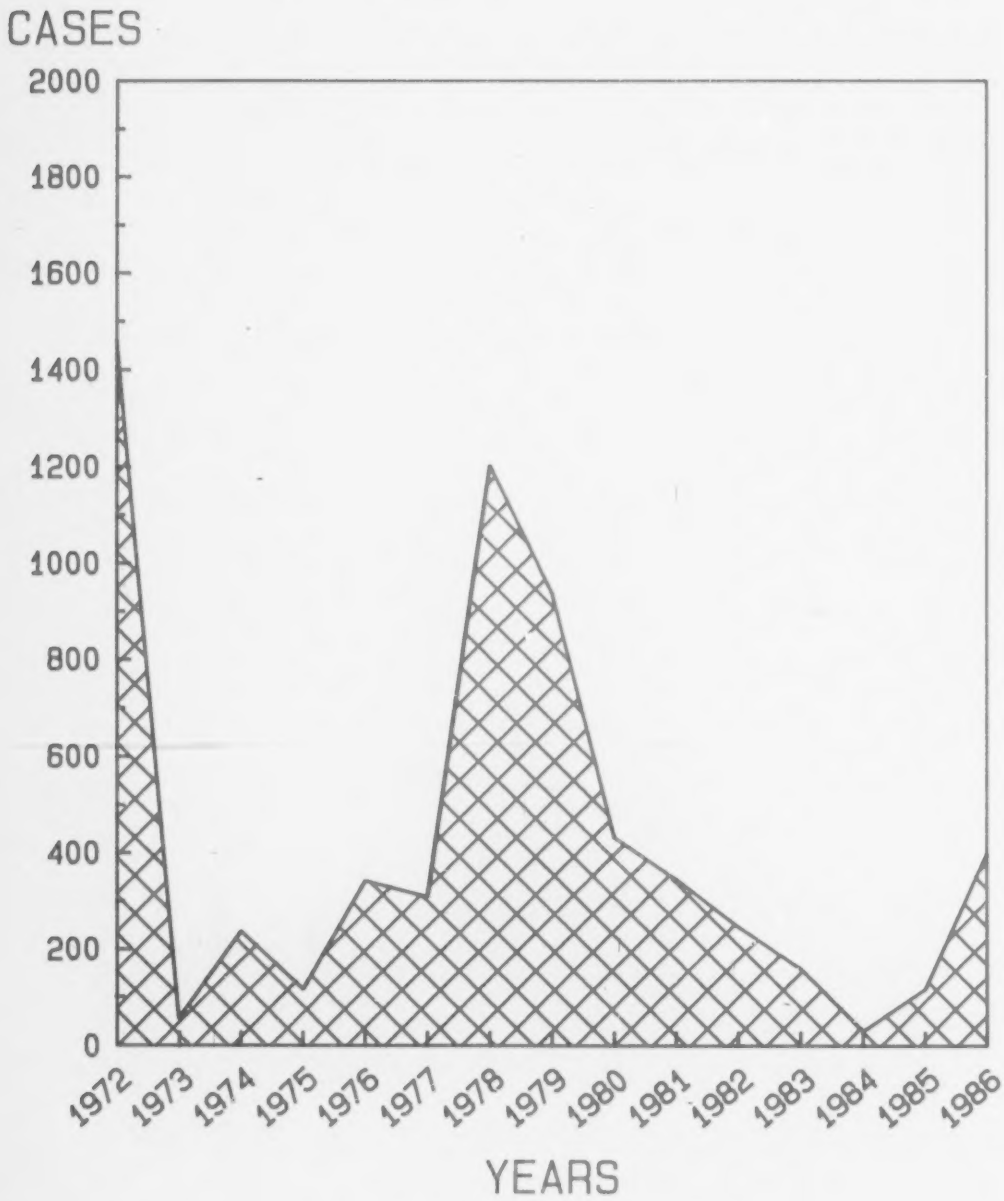
MEASLES (RUBEOLA) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



MEASLES (RUBEOLA) - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



MEASLES (RUBEOLA) CASES REPORTED
FLORIDA, 1972-1986



MUMPS

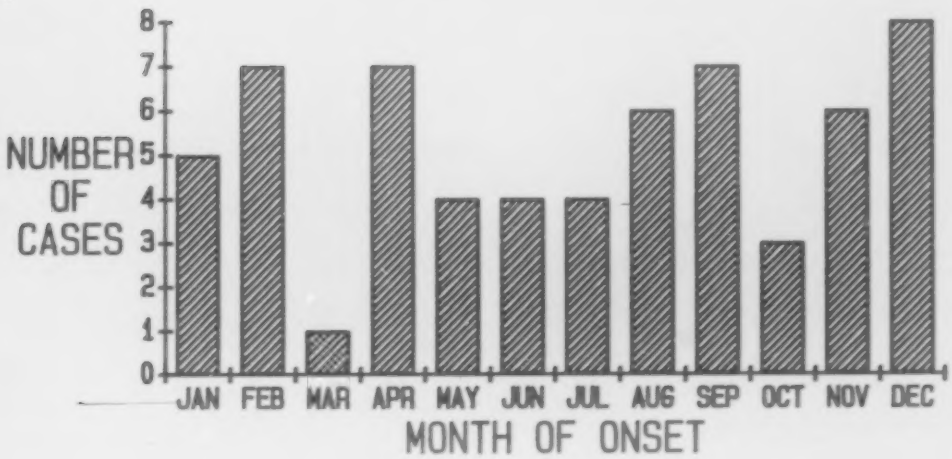
In 1986, 62 cases of mumps were reported, which represents a 1.6% increase from the total number of cases reported in 1985 (61). No seasonal variation was noted. The incidence in 1986 (0.5 per 100,000) did not change from 1985. Children aged 1-4 had the highest incidence (2.8 per 100,000) with 17 cases. The 5-9 year old age group contributed 19 cases (2.7 per 100,000).

MUMPS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

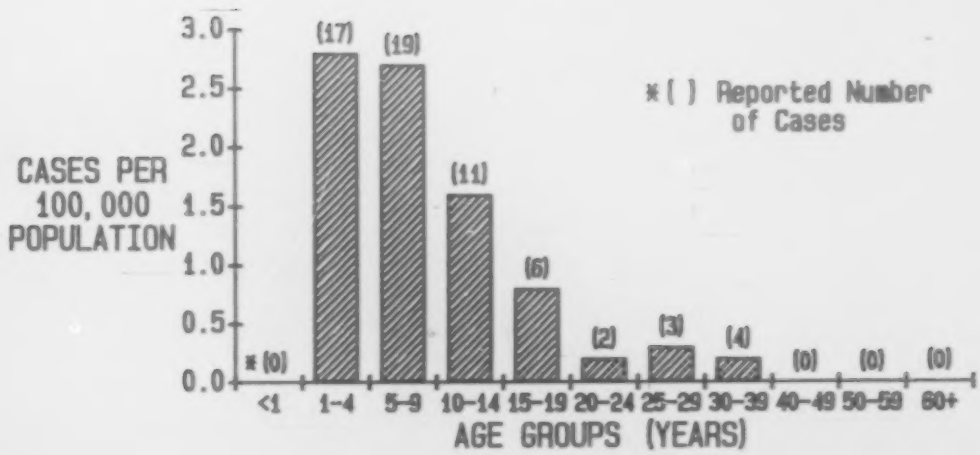
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.7
	Santa Rosa					1				1					2	3.1	0.0
	Walton															0.0	0.0
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon									1	1	2			4	2.3	0.6
	Liberty															0.0	7.4
	Madison								2						2	12.7	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua	1	2							1					4	2.3	0.0
	Bradford												1		1	4.2	0.0
	Citrus															0.0	0.0
	Columbia															0.0	0.8
	Dixie															0.0	0.0
	Gilchrist															0.0	9.4
	Hamilton															0.0	0.0
	Hernando				1							1			2	2.7	6.0
	Lafayette															0.0	0.0
	Lake							2							2	1.5	0.3
	Levy															0.0	0.0
	Marion															0.0	0.0
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker				1										1	5.6	0.0
	Clay												1		1	1.1	1.2
	Duval															0.0	0.3
	Flagler															0.0	0.0
	Nassau															0.0	0.8
	St. Johns															0.0	2.9
	Volusia		1			2		1	2				1		7	2.2	1.5
V	Pasco															0.0	0.0
	Pinellas		1												1	0.1	0.9
VI	Hardee															0.0	3.2
	Highlands															0.0	0.0
	Hillsborough											1	1		2	0.3	0.8
	Manatee															0.0	0.0
	Polk									2		1	1		4	1.1	1.0
VII	Brevard															0.0	0.4
	Orange															0.0	0.0
	Osceola	1													1	1.2	0.9
	Seminole				1					1			1		3	1.2	1.8
VIII	Charlotte															0.0	0.0
	Collier			1	3	1	1	1	2	1					10	8.2	4.1
	DeSoto															0.0	1.5
	Glades															0.0	0.0
	Hendry												1		1	4.2	3.0
	Lee															0.0	0.3
	Sarasota															0.0	0.6
IX	Indian River															0.0	0.0
	Martin															0.0	0.8
	Okeechobee															0.0	0.0
	Palm Beach	2	3		1		3				2		1		12	1.6	0.7
	St. Lucie															0.0	0.0
X	Broward											1			1	0.1	0.0
XI	Dade															0.0	0.0
	Monroe	1													1	1.4	1.4
STATE TOTAL		5	7	1	7	4	4	4	6	7	3	6	8		62	0.5	0.5

*1983-1985 Average rate

MUMPS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



MUMPS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



PERTUSSIS

In 1986, 82 cases of pertussis were reported, which represents a 9% increase from 1985 (75). The incidence in 1986 (0.7 per 100,000) did not change from the rate in 1985.

The highest number of cases (12) reported was in the month of April.

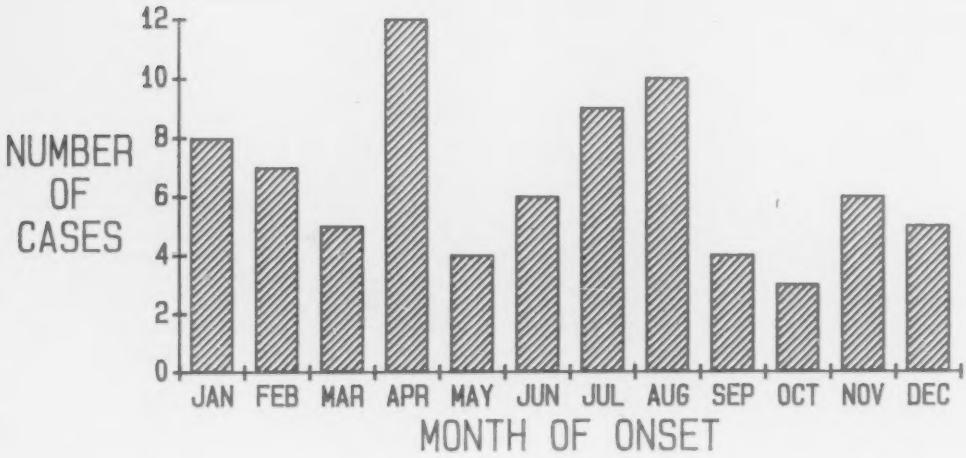
Children less than one year of age had the highest occurrence, 41 cases (25.1 per 100,000) followed by 1-4 year olds, 37 cases (6.1 per 100,000). Only two cases were reported in persons older than 19 years of age.

PERTUSSIS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

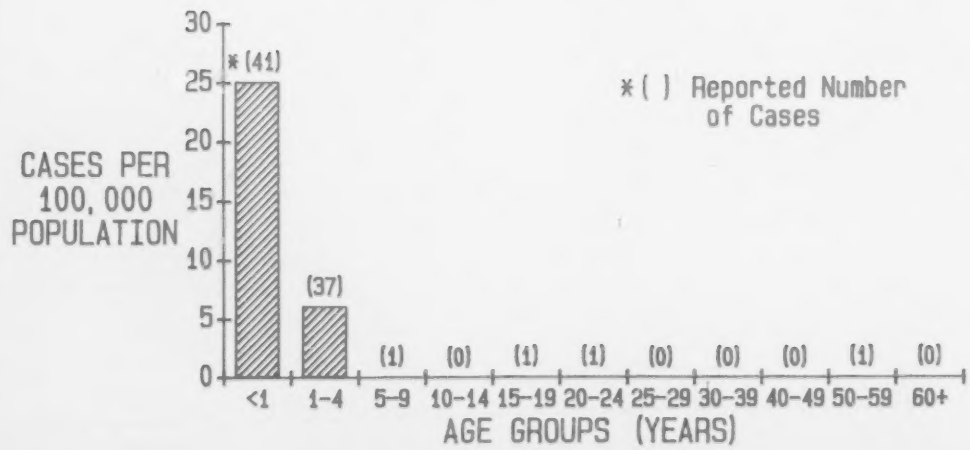
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia															0.0	0.0
	Okaloosa				1										1	0.7	0.0
	Santa Rosa															0.0	0.0
	Walton															0.0	1.3
II	Bay															0.0	0.3
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	3.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon															0.0	0.8
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	1.9
	Wakulla															0.0	0.0
	Washington															0.0	2.2
III	Alachua			1	1										2	1.1	2.9
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	14.1
	Hamilton															0.0	3.6
	Hernando									1					1	1.3	0.0
	Lafayette															0.0	0.0
	Lake							1	1						2	1.5	0.5
	Levy															0.0	0.0
	Marion													1	1	0.6	0.6
	Putnam															0.0	0.0
	Sumter															0.0	1.2
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	3.8
	Clay															0.0	5.1
	Duval	3	1	1								2	2		9	1.4	2.3
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	4.4
	Volusia			2	2		1								5	1.6	0.0
V	Pasco					1									1	0.4	0.0
	Pinellas		2							1					3	0.4	0.6
VI	Hardee															0.0	1.6
	Highlands															0.0	0.0
	Hillsborough	1			1			3	1	1					7	0.9	0.6
	Manatee						1		1						2	1.1	0.4
	Polk					3	1	1	3			2			10	2.6	3.3
VII	Brevard											1			1	0.3	1.1
	Orange															0.0	0.0
	Osceola															0.0	0.4
	Seminole															0.0	0.0
VIII	Charlotte															0.0	0.0
	Collier						1						1		2	1.6	0.0
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	7.4
	Lee											1			1	0.4	0.3
	Sarasota															0.0	0.3
IX	Indian River															0.0	0.4
	Martin	1					1								2	2.4	1.7
	Okeechobee															0.0	0.0
	Palm Beach		1					1	1		1		1		5	0.7	0.5
	St. Lucie				1					1					2	1.6	2.0
X	Broward			1	1			1	3		2		1	2	11	1.0	0.2
XI	Dade	1	3		5										9	0.5	0.4
	Monroe	2					1	2							5	6.9	0.0
STATE TOTAL		8	7	5	12	4	6	9	10	4	3	6	5	3	82	0.7	0.7

*1983-1985 Average rate

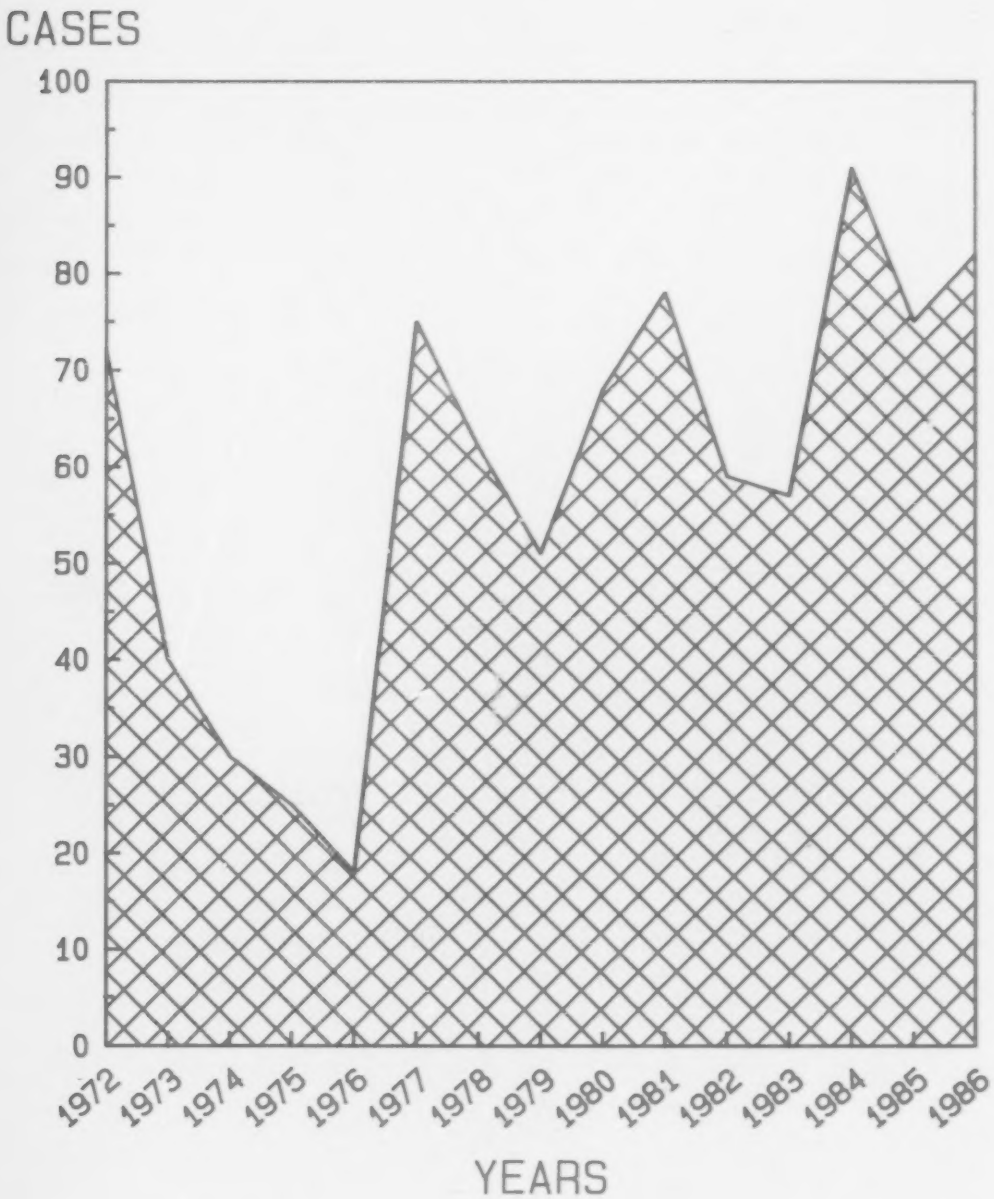
PERTUSSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



PERTUSSIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



PERTUSSIS CASES REPORTED
FLORIDA, 1972-1986



RUBELLA

In 1986, 12 cases of rubella were reported to the state, which represents a 60% decrease from 1985 (30). The incidence in 1986 (0.1 per 100,000) decreased 62% from the 1985 rate (0.26 per 100,000).

The highest number of cases (3) was reported in November.

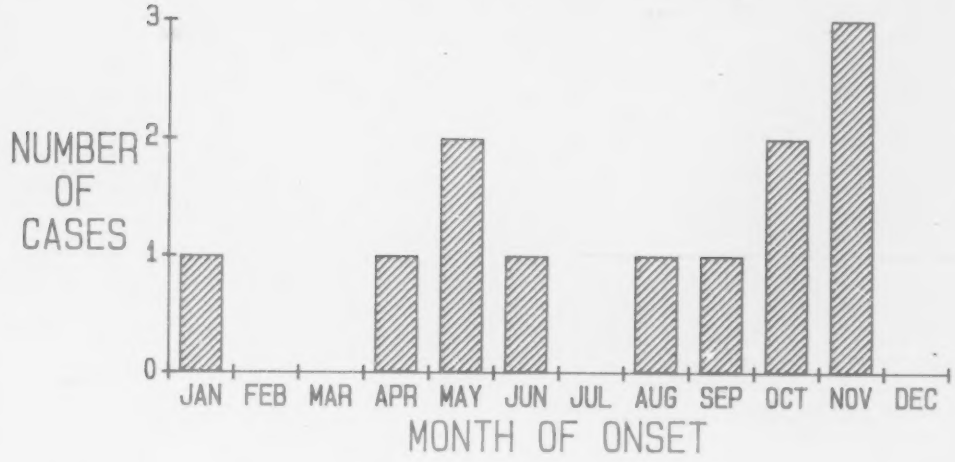
Children aged 1-4 had the highest incidence with nine reported cases (1.5 per 100,000). No congenital rubella has been reported since 1981.

RUBELLA – REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1986

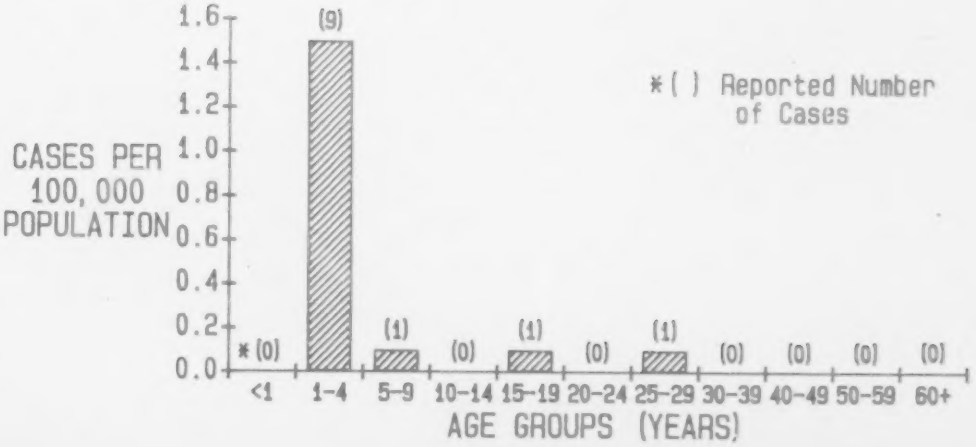
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3–YR.* MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.2
	Santa Rosa															0.0	0.5
	Walton								1						1	3.7	3.9
II	Bay															0.0	0.6
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon															0.0	0.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	1.2
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	4.7
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake															0.0	0.0
	Levy															0.0	0.0
	Marion															0.0	0.0
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	0.0
	Clay															0.0	0.0
	Duval															0.0	0.0
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	1.0
	Volusia															0.0	3.4
V	Pasco															0.0	0.0
	Pinellas															0.0	0.2
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough															0.0	0.0
	Manatee											1			1	0.6	0.6
	Polk															0.0	0.0
VII	Brevard															0.0	0.5
	Orange						1								1	0.2	0.0
	Osceola															0.0	0.0
	Seminole	1									1				2	0.8	0.1
VIII	Charlotte															0.0	0.0
	Collier										1				1	0.8	2.3
	DeSoto															0.0	3.1
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee															0.0	0.0
	Sarasota															0.0	0.1
IX	Indian River															0.0	0.0
	Martin															0.0	0.0
	Okeechobee															0.0	0.0
	Palm Beach					2				1		2			5	0.7	0.3
	St. Lucie															0.0	0.0
X	Broward															0.0	0.0
XI	Dade				1										1	0.1	0.2
	Monroe															0.0	0.0
STATE TOTAL		1	0	0	1	2	1	0	1	1	2	3	0	0	12	0.1	0.3

*1983–1985 Average rate

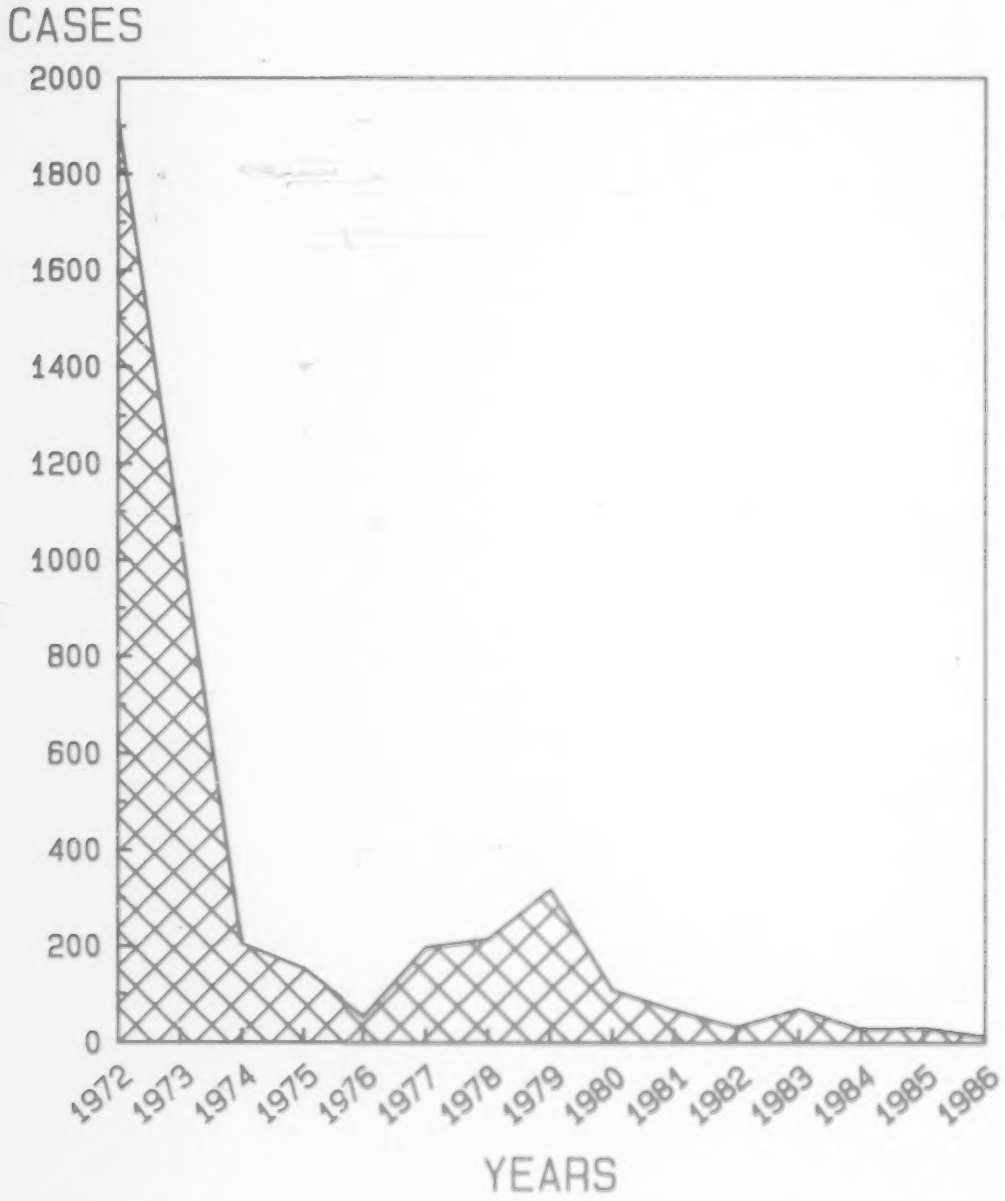
RUBELLA - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1986



RUBELLA - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1986



RUBELLA CASES REPORTED
FLORIDA, 1972-1986



SECTION 4:

Analysis of Animal Rabies & Zoonotic Diseases

Prepared by Epidemiology Program
William J. Bigler, Ph.D., Deputy State Epidemiologist

ANIMAL RABIES

Of the 4,535 animal specimens examined for rabies in 1986, 183 (4.0%) were positive in flourescent rabies antibody (FRA) tests (Table 2). This represents only a slight increase (12%) over the total number of cases (159) reported for 1985. However, this is the greatest number of cases reported since 1948 when 331 cases were reported.

Rabies positive animals were identified in 40 counties compared to 38 counties in 1985 (Table 3). As in past years cases have occurred throughout the state with most being reported from the central and north central counties.

Cases of rabies in raccoons (128) accounted for about 70% of the total cases reported and 19.3% of those examined were positive in FRA tests. Cases in raccoons occurred throughout the state with outbreaks reported in north (Jackson, Hamilton and Holmes counties) and central (Polk and Orange counties) Florida.

Cases of rabies in bats accounted for 18.6% of the total cases reported this year with 10.7% of all bats examined positive in FRA tests. Most of the reported cases of rabies in bats occurred in two species, the red bat (Lasiuris borealis) and the seminole bat (Lasiuris seminolus) from counties located in north Florida. One urban area, Pensacola (Escambia County) experienced an outbreak of bat rabies between July and September. A similar outbreak occurred in this same area in 1983.

Reported cases in other wildlife and domestic animals comprised 11% of all cases. Cases in dogs (4/938) and cats (7/1,484) have increased dramatically this year. It has been several years since such high numbers of rabid dogs and cats (1980 and 1981 respectively) have been reported.

TABLE 1

ANIMAL RABIES - Laboratory Confirmed Cases by Species, Florida, 1977-1986

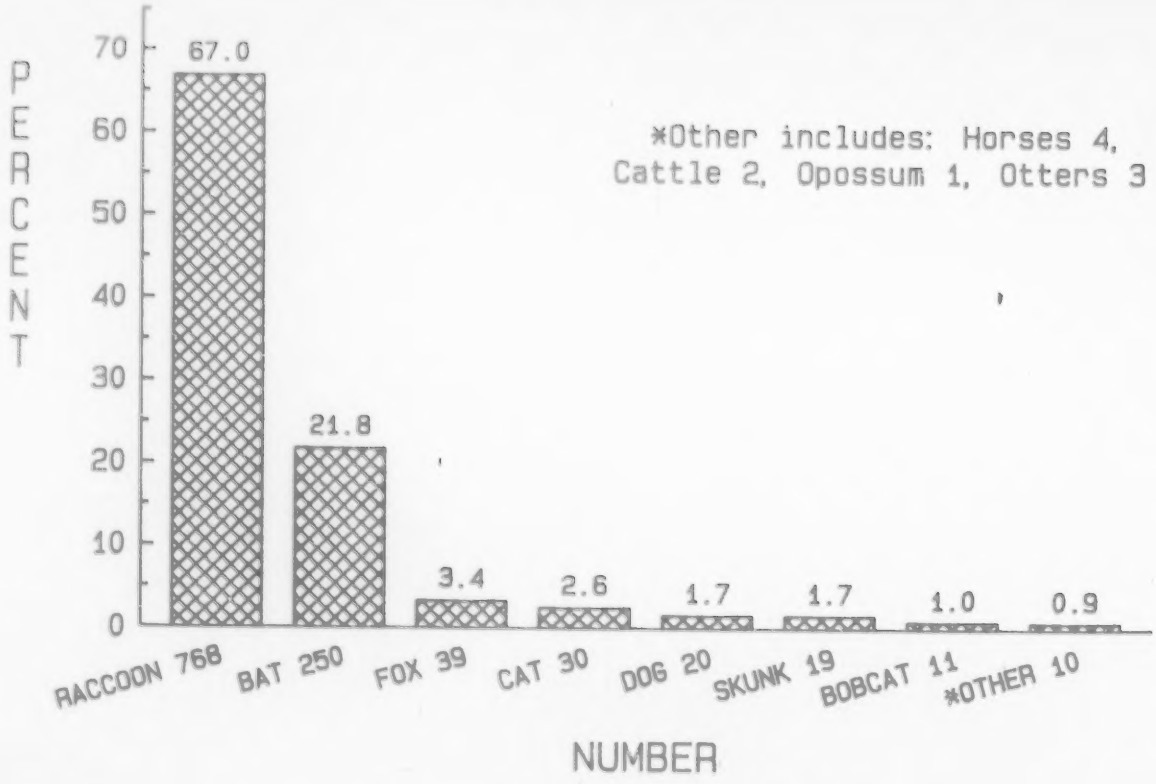
ANIMAL SPECIES	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
BAT	34	21	48	69	18	17	9	10	8	16
BOBCAT	0	3	2	1	0	0	2	0	2	1
CAT	7	1	1	2	1	7	3	5	1	2
CATTLE	0	0	0	1	0	0	1	0	0	0
DOG	4	2	1	1	2	1	4	3	1	1
FOX	5	6	3	0	6	7	3	5	1	3
HORSE	1	0	0	0	0	1	1	1	0	0
OPOSSUM	0	0	0	0	0	1	0	0	0	0
OTTER	1	0	1	0	0	0	0	0	0	1
RACCOON	128	122	92	56	51	79	84	54	33	69
SKUNK	3	4	1	1	2	3	3	1	1	0
STATE TOTAL	183	159	149	131	80	116	110	79	47	93

TABLE 2

ANIMAL RABIES - LABORATORY CONFIRMED CASES AND SPECIMENS EXAMINED, FLORIDA, 1986

Species	Number Examined	Number and Percent ( ) Positive	Percent of All Species Examined (N=4,535)	Percent of All Positive (N=183)
Dogs	938	4 (0.43)	20.68%	2.19%
Cats	1,484	7 (0.47)	32.72%	3.83%
	2,422	11 (0.45)	53.41%	6.01%
Raccoons	663	128 (19.31)	14.62%	69.95%
Bats	317	34 (10.73)	6.99%	18.58%
Skunks	106	3 (2.83)	2.34%	1.64%
	1,086	165 (15.19)	23.95%	90.16%
Fox	79	5 (6.33)	1.74%	2.73%
Bobcat	7	0 (0.00)	0.15%	0.00%
Other Wild	340	1 (0.29)	7.50%	0.55%
	426	6 (1.41)	9.39%	3.28%
Cattle	11	0 (0.00)	0.24%	0.00%
Horse	27	1 (3.70)	0.60%	0.55%
Other Domestic	8	0 (0.00)	0.18%	0.00%
	46	1 (2.17)	1.01%	0.55%
Rodents & Lagomorphs	555	0 (0.00)	12.24%	0.00%
TOTAL ALL SPECIES	4,535	183 (4.04)	100.00%	100.00%

ANIMAL RABIES
FLORIDA, 1977-1986
TOTAL 1,147



*Other includes: Horses 4, Cattle 2, Opossum 1, Otters 3

TABLE 3

ANIMAL RABIES - Reported laboratory confirmed cases, by county, Florida, 1977-1986

COUNTY	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977
Alachua	6	2			2	4	9	5	2	3
Baker	1			2			1			
Bay	7	5	2	1	1	2		3	1	2
Bradford					1		2			
Brevard	1	5	3	5	1			2		2
Broward			1			1				1
Calhoun	1	1				1	2			
Charlotte	1	1						1		1
Citrus			1	1	1					3
Clay	4	1		5	1	1				1
Collier	1					1		2	2	3
Columbia	1	3	2		3	4	4	2	1	3
Dade		1			1		1		1	2
DeSoto	2	1			1			1		1
Dixie						1				
Duval	11	4	4	22	4	6	9	4	2	3
Escambia	14	2	7	19	2	1	1			
Flagler	2	1				3	1	1		
Franklin			1		1					
Gadsden	1	1	4	5	1	3	1	4	1	
Gilchrist	1	1								
Glades		1								
Gulf	2	3	1						1	
Hamilton	8	7		1	1	2	1	1	1	3
Hardee		4		3		2	2	3		2
Hendry										
Hernando		2	1	1	2					
Highlands	2					1	2			
Hillsborough	4	5	1	3	1	3	2	5	6	5
Holmes	6	5	5	3		5	3	2		
Indian River				1						
Jackson	10	13	3	3	2	7	1	3	1	2
Jefferson	2	6	4	2		2	4	2		
Lafayette		1					4	1		
Lake	4			1	3	3	3	2		
Lee				1	2	7	2	3		
Leon	3	20	27	13	12		13	5	3	2
Levy	7	2			1			1	1	1
Liberty										
Madison	3	6	1		2	3	3		2	1
Manatee						2	1	2	1	
Marion	6	2	1	6	1	7	4	5		9
Martin			1	2						
Monroe										
Nassau					4		1	1		2
Okaloosa	6	3	5	4	1	1	2	2	1	2
Okeechobee	2			1						
Orange	14	17	21	1	3	1	1	1	1	3
Osceola	3				2				2	1
Palm Beach					2	1	1			
Pasco		2		1	1					
Pinellas										
Polk	21	19	33	9	3	10	2		1	2
Putnam	1		1	1	2	3	2	1		2
St. Johns	7		1	1	2	2			5	3
St. Lucie	1				2					
Santa Rosa	2		2	3	2					
Sarasota	4	1	1	3			5	2	5	21
Seminole	3	4	8	3	1	1	1	1	1	1
Sumter										1
Suwannee	5	1				14	3	2		2
Taylor					1	1	1		1	
Union										
Volusia		1	1	1	3	7	7	3		2
Wakulla			1				1	2	1	
Walton	1	1	2	2	2	3	3	2	1	1
Washington	2	4	3	1	2		3	2	2	
STATE TOTAL	183	159	149	131	80	116	110	79	47	93

TABLE 4

ANIMAL RABIES - LABORATORY CONFIRMED CASES, BY COUNTY, BY SPECIES, BY MONTH OF REPORT, FLORIDA, 1986

County	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alachua		1 Rac	1 Rac				1 Rac		1 Bat	1 Rac	1 Rac		6
Baker						1 Rac							1
Bay								1 Rac	4 Bat 1 Rac	1 Rac			7
Bradford													
Brevard										1 Otter			1
Broward													
Calhoun							1 Cat						1
Charlotte				1 Rac									1
Citrus													
Clay								1 Bat 1 Rac		1 Rac	1 Rac		4
Collier		1 Rac											1
Columbia					1 Rac								1
Dade													
DeSoto	1 Rac											1 Rac	2
Dixie													
Duval		1 Bat					2 Bat 2 Rac	1 Bat	1 Cat 3 Rac	1 Rac			11
Escambia							1 Bat	8 Bat	5 Bat				14
Flagler								1 Rac				1 Rac	2
Franklin													
Gadsden					1 Fox								1
Gilchrist								1 Rac					1
Glades													
Gulf								1 Rac	1 Rac				2
Hamilton		1 Rac	1 Skunk 1 Rac	2 Rac	2 Rac		1 Rac						8
Hardee													
Hendry													
Hernando													
Highlands								1 Rac			1 Rac		2
Hillsborough		1 Rac	1 Rac		1 Bat	1 Bat							4
Holmes			1 Rac			1 Cat		1 Rac	2 Rac		1 Rac		6
Indian River													
Jackson	1 Rac	1 Rac					1 Cat 2 Rac			2 Rac	2 Rac	1 Rac	10
Jefferson												1 Fox 1 Rac	2
Lafayette													
Lake			1 Fox 1 Rac	1 Fox	1 Dog								4
Lee													
Leon						1 Rac	1 Rac		1 Rac				3
Levy				1 Rac	1 Rac			1 Dog	2 Rac	1 Rac	1 Dog		7
Liberty													
Madison			1 Rac	1 Rac			1 Rac						3
Manatee													
Marion		1 Rac	1 Rac	1 Rac								1 Rac	4
Martin													
Monroe													
Nassau													
Okaloosa				1 Rac	2 Rac	2 Rac		1 Bat					6
Okeechobee			1 Rac	1 Rac									2
Orange		1 Rac	3 Rac	4 Rac	3 Rac				1 Rac	2 Rac			14
Osceola		1 Skunk				1 Rac							2
Palm Beach													
Pasco													
Pinellas													
Polk	3 Rac	4 Rac	3 Rac	1 Cat 2 Rac	1 Rac	1 Rac		1 Bat	1 Rac	1 Bat 2 Rac	1 Rac		21
Putnam												1 Rac	1
St. Johns		1 Rac		1 Rac	1 Rac			1 Bat 2 Rac				1 Cat	7
St. Lucie							1 Fox						1
Santa Rosa									1 Bat		1 Bat		2
Sarasota							1 Bat	1 Bat	2 Rac				4
Seminole		1 Rac		1 Rac			1 Rac						3
Sumter													
Suwannee			1 Rac	1 Rac		1 Rac				1 Horse 1 Skunk			5
Taylor													
Union													
Volusia													
Wakulla													
Walton				1 Rac									1
Washington							1 Cat					1 Dog	2
TOTAL	5	15	17	20	14	9	17	24	26	16	9	11	183

ZOONOTIC DISEASES

Brucellosis

Seven cases of brucellosis were reported in 1986 compared with a mean of 10.8 cases for the previous 5 years (1981-1985). All cases had onset between January and September. All except one (Duval County) occurred in either central (Brevard [3 cases] and Hillsborough Counties) or south Florida (Sarasota and Collier Counties). Six were male and 1 female. Two were 20-29 years of age, 2 were 30-39 and 2 were 40-49 and one was 50-59. The probable source of exposure was documented in 6 cases. Four of these were in individuals that handled or ate the meat of wild hogs killed in Collier and Brevard counties. One was a taxidermist who had contact with unspecified wildlife and the other was a laboratory technician who worked with Brucella cultures abroad.

Leptospirosis

Only one case of leptospirosis was reported in 1986 compared with a mean of 4.8 cases for the previous 5 years (1981-1985). This individual a 24 year old white male from Levy county had onset in September. As a milker at a dairy farm his exposure was presumed to be dairy cows.

Psittacosis

Three cases of psittacosis were reported in 1986 compared to a mean of 4.8 cases for the previous 5 years (1981-1985). All cases had onset between July and September. They occurred in Duval, Indian River and Hillsborough Counties. Two were male and one female with two 30-39 years of age and one 70-79. One case worked in a pet shop and the other two had contact with psittacine birds in a residential setting.

Rocky Mountain Spotted Fever

Two cases of rocky mountain spotted fever were reported during 1986 as compared with a mean of 7.8 cases reported during the previous 5 years (1981-1985). Both were white males from Lake and Alachua counties. One was 10 to 19 years of age and the other was 40 to 49. Onset occurred during the summer (June and August) and both had been exposed to ticks prior to onset.

ZOONOTIC DISEASES - Reported cases, by disease, by county, Florida, 1986

	BRUCELLOSIS	LEPTOSPIROSIS	PSITTACOSIS	ROCKY MOUNTAIN SPOTTED FEVER
Alachua				1
Baker				
Bay				
Bradford				
Brevard	3			
Broward				
Calhoun				
Charlotte				
Citrus				
Clay				
Collier	1			
Columbia				
Dade				
DeSoto				
Dixie				
Duval	1		1	
Escambia				
Flagler				
Franklin				
Gadsden				
Gilchrist		1		
Glades				
Gulf				
Hamilton				
Hardee				
Hendry				
Hernando				
Highlands				
Hillsborough	1		1	
Holmes				
Indian River			1	
Jackson				
Jefferson				
Lafayette				
Lake				1
Lee				
Leon				
Levy				
Liberty				
Madison				
Manatee				
Marion				
Martin				
Monroe				
Nassau				
Okaloosa				
Okeechobee				
Orange				
Osceola				
Palm Beach				
Pasco				
Pinellas				
Polk				
Putnam				
St. Johns				
St. Lucie				
Santa Rosa				
Sarasota	1			
Seminole				
Sumter				
Suwannee				
Taylor				
Union				
Volusia				
Wakulla				
Walton				
Washington				
STATE TOTAL	7	1	3	2

SECTION 5:

SUMMARY OF ACQUIRED IMMUNE DEFICIENCY SYNDROME

Prepared by the AIDS Program
Joyner Sims, Ph.D., Program Administrator

AIDS

Introduction

By the end of 1985, the HRS AIDS Program was officially established with AIDS Surveillance as one of three units within the program. Reporting was maintained utilizing the 1985 revision of the case definition developed by the Centers for Disease Control. In early 1986, the AIDS central registry was computerized and greatly facilitated data summary and analysis. The number of cases reported during 1986 increased over previous years, although the demographic and risk group distribution was similar to 1985.

Morbidity

As of December 31, 1986 a total of 2,624 cases of AIDS were reported to the Florida Department of Health and Rehabilitative Services with onset of illness occurring from 1980 through 1986. Of these, 6 cases were diagnosed in 1980, 17 cases were diagnosed in 1981, 82 in 1982, 211 in 1983, 413 in 1984, 757 in 1985, and 1,138 in 1986.

Age, Race, and Sex

The distribution of AIDS cases in Florida by age group is shown in Table 1. For those diagnosed in 1986, the greatest number of cases occurred in the 30-39 year age group (42%), followed by those 25-29 years of age (20%), and those aged 40-49 years (18%). Twenty-three pediatric cases (<13 years of age) were diagnosed during this time period. Of these, 11 (47.8%) were under the age of one.

Of the total adult cases (1,115) diagnosed in 1986, 996 (89%) were male, and 119 (11%) were female. For all cases diagnosed in 1986, 577 (51%) were white, 422 (37%) were black, 134 (12%) were Hispanic, and 5 were other race or unknown (Table 2).

Risk Category

Data by risk category for the cases diagnosed in 1986 are shown in Table 3. The greatest proportion of adult cases were identified as homosexual or bisexual men (56%), followed by intravenous drug users (16%). Heterosexual contact was the next most frequent mode of transmission, accounting for 149 (13%) of the adult cases reported. Among the 23 pediatric cases, most (65%) had a parent with AIDS or at risk for AIDS, 2 (9%) acquired the disease through blood transfusions, and 2 (9%) were reported as hemophiliac.

Disease Group and Mortality

In 1986, the greatest proportion of cases were diagnosed with Pneumocystis carinii pneumonia (PCP), accounting for 58% of the total. The second most common opportunistic disease was Kaposi's Sarcoma (KS), which accounted for 9%. The remainder (33%) were diagnosed with other opportunistic diseases without PCP (Table 4). Over one half (69%) of the cases were reported to have died.

Geographic Distribution

Dade County accounted for the majority of cases diagnosed in 1986 with a total of 401 (35%), followed by the counties of Broward and Palm Beach which reported 211 (19%) and 125 (11%), respectively. A total of 37 counties throughout the state had at least one case of diagnosed AIDS during this time period (Table 5), however, the majority (71%) were residents of South Florida at onset of illness (Districts IX, X, or XI). Incidence per 100,000 population is also shown for each county reporting AIDS cases. Monroe County reported the highest incidence for Florida with a rate of 37 cases per 100,000.

TABLE 1

Reported AIDS cases by age group, Florida, 1986

Age	Number (%)
< 1	11 (1)
1 - 4	6 (1)
5 - 9	3 (0)
10 - 14	4 (0)
15 - 19	5 (0)
20 - 24	67 (6)
25 - 29	224 (20)
30 - 39	481 (42)
40 - 49	207 (18)
50 - 59	81 (7)
60+	49 (4)
TOTAL	1138 (100)

TABLE 2

Reported AIDS cases by race/ethnicity, Florida, 1986

Race/Ethnicity	Adult/ Adolescent Cases (%)	Pediatric Cases (%)	Total Cases (%)
White, Not Hispanic	573 (51)	4 (17)	577 (51)
Black, Not Hispanic	403 (36)	19 (83)	422 (37)
Hispanic	134 (12)	0 (0)	134 (12)
Other	2 (0)	0 (0)	2 (0)
Unknown	3 (0)	0 (0)	3 (0)
TOTAL	1115 (100)	23 (100)	1138 (100)

TABLE 3

Reported AIDS cases by patient group, Florida, 1986

Patient Groups	Adult/Adolescent		
	Males (%)	Females (%)	Total (%)
Homosexual or Bisexual Men	628 (63)	0 (0)	628 (56)
Intravenous (IV) Drug User	132 (13)	43 (36)	175 (16)
Homo/Bi IV Drug User	76 (8)	0 (0)	76 (7)
Hemophiliac	6 (1)	0 (0)	6 (1)
Heterosexual contact	91 (9)	58 (49)	149 (13)
Transfusion with blood/products	21 (2)	10 (8)	31 (3)
None of the Above / Other	42 (4)	8 (7)	50 (4)
Total	996 (100)	119 (100)	1115 (100)

Patient Groups	Pediatric		
	Males (%)	Females (%)	Total (%)
Hemophiliac	2 (17)	0 (0)	2 (9)
Parent at risk/has AIDS/HIV	7 (58)	8 (93)	15 (65)
Transfusion with blood/products	2 (17)	0 (0)	2 (9)
None of the Above / Other	1 (8)	3 (7)	4 (17)
Total	12 (100)	11 (100)	23 (100)

TABLE 4

Reported AIDS cases by disease category, Florida, 1986

Disease Category	Adult/Adolescent		Pediatric	
	Cases (%)	Deaths (%)	Cases (%)	Deaths (%)
PCP	649 (58)	455 (70)	12 (52)	9 (75)
Other Disease w/o PCP	368 (33)	260 (71)	11 (48)	4 (36)
KS Alone	98 (9)	62 (63)	0 (0)	0 (0)
Total	1115 (100)	777 (79)	23 (100)	13 (57)

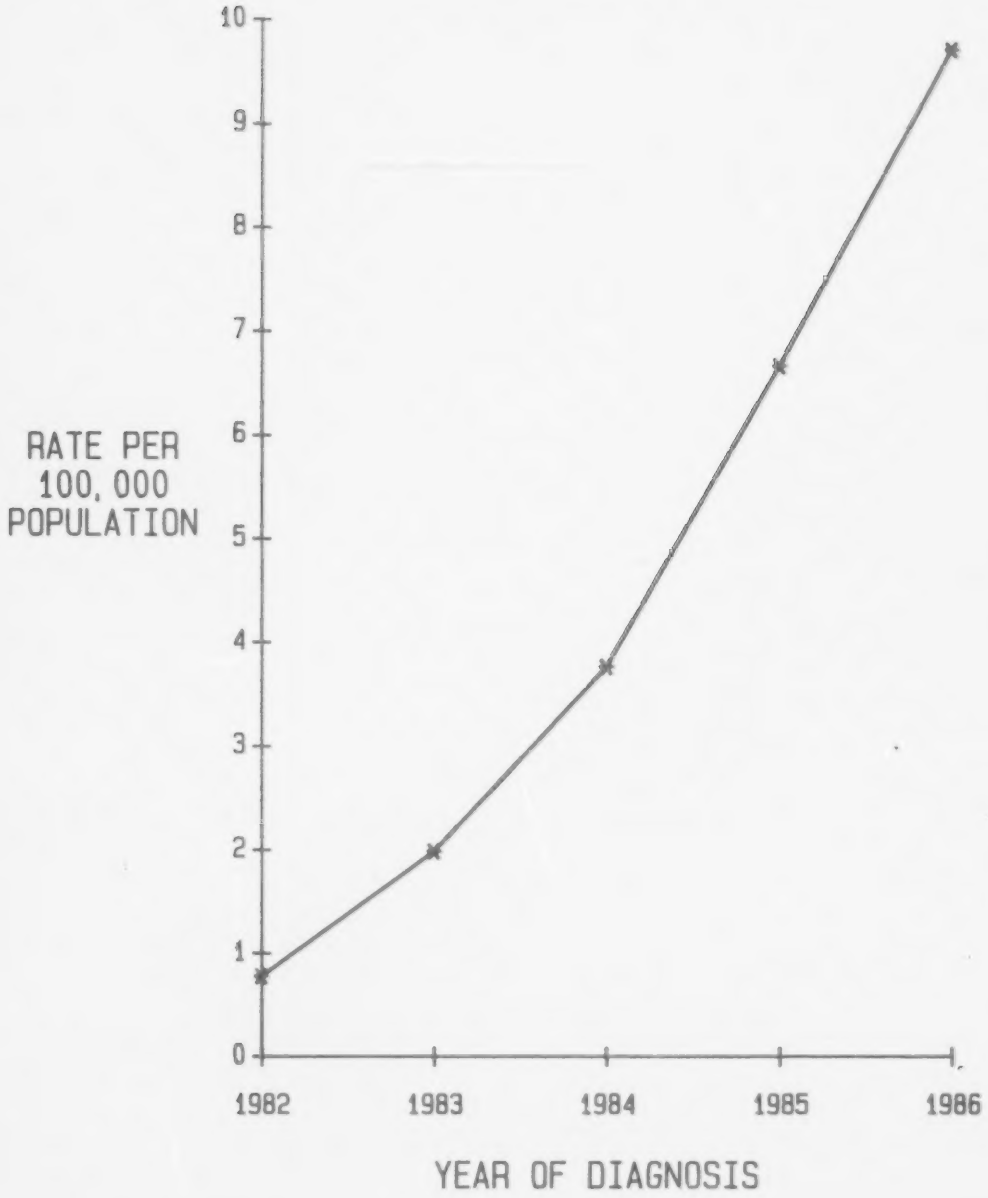
Disease Category	Total	
	Cases (%)	Deaths (%)
PCP	661 (58)	464 (70)
Other Disease w/o PCP	379 (33)	264 (70)
KS Alone	98 (9)	62 (63)
Total	733 (100)	790 (69)

TABLE 5

Reported AIDS cases by County of Residence at Onset of Illness, Florida, 1986

District	County	Number Reported	Percent of Total	Rate Per 100,000
I	Escambia	4	(0.35)	1.46
	Okaloosa	1	(0.09)	0.69
	Santa Rosa	1	(0.09)	1.53
II	Bay	2	(0.18)	1.58
	Jackson	1	(0.09)	2.36
	Leon	9	(0.79)	5.20
	Taylor	1	(0.09)	5.45
III	Alachua	6	(0.53)	3.39
	Hernando	1	(0.09)	1.34
	Levy	1	(0.09)	4.29
	Marion	1	(0.09)	0.59
IV	Clay	2	(0.18)	2.21
	Duval	53	(4.66)	8.15
	Flagler	1	(0.09)	5.63
	Nassau	1	(0.09)	2.37
	Volusia	14	(1.23)	4.35
V	Pasco	3	(0.26)	1.21
	Pinellas	45	(3.95)	5.49
VI	Hillsborough	58	(5.10)	7.42
	Manatee	5	(0.44)	2.82
	Polk	10	(0.88)	2.63
VII	Brevard	15	(1.32)	4.16
	Orange	44	(3.87)	7.54
	Seminole	7	(0.62)	2.87
VIII	Charlotte	3	(0.26)	3.57
	Collier	12	(1.05)	9.82
	Hendry	3	(0.26)	12.67
	Lee	26	(2.29)	9.26
	Sarasota	8	(0.70)	3.24
IX	Indian River	1	(0.09)	1.24
	Martin	2	(0.18)	2.36
	Okeechobee	1	(0.09)	3.73
	Palm Beach	125	(11.00)	16.45
	St. Lucie	5	(0.44)	4.06
X	Broward	211	(18.54)	18.27
XI	Dade	401	(35.23)	22.53
	Monroe	27	(2.37)	37.02
Department of Corrections		23	(2.02)	------
Unknown County		4	(0.35)	------
	TOTAL	1138	(100.0)	9.69

AIDS
REPORTED CASE RATES
FLORIDA, 1982 - 1986



SECTION 6:

SUMMARY OF SEXUALLY TRANSMITTED DISEASES

Prepared by Sexually Transmitted Disease Program
Jack E. Wroten, Program Supervisor

SYPHILIS

Morbidity Trends

In 1986, 9,427 reports of syphilis represented an increase of 1,458 cases (18.3%) from the 7,969 cases reported in 1985. This represents a 115.0% increase over 1980 when 4,384 cases were reported. Since 1980, significant increases have occurred for all stages of syphilis (115.0% overall); primary and secondary (92.5%), early latent (191.5%), and late and late latent (77.3%).

Despite a rise in population of 1,931,194 between 1980 and 1986, the rate per 100,000 for all stages of syphilis jumped from 44.7 to 80.3 (see chart below).

Year	Population	Total Syphilis		Primary & Secondary		Early Latent		Late & Late Latent		Congenital	
		CASES	RATES	CASES	RATES	CASES	RATES	CASES	RATES	CASES	RATES
1986	11,744,900	9427	80.3	4344	37.6	3107	26.9	1876	16.2	100	0.9
1985	11,377,318	7969	70.0	3679	32.3	2504	22.0	1755	15.4	31	0.27
1984	11,015,061	8314	75.5	3876	35.2	2812	25.5	1596	14.5	30	0.27
1983	10,645,793	8404	79.0	4179	39.3	2501	23.5	1699	16.0	25	0.24
1982	10,555,498	7936	75.2	4149	39.3	1884	17.9	1895	18.0	8	0.08
1981	10,108,564	5971	59.1	3036	30.3	1376	13.6	1552	15.4	7	0.07
1980	9,813,706	4384	44.7	2257	23.0	1066	10.9	1058	10.8	3	0.03

The majority (59.7%) of the 4,344 cases of primary and secondary syphilis were reported in persons 15 to 29 years old. Those 15 to 19 accounted for 10.5% (455 cases); those 20 to 24, for 25.2% (1,093 cases); and those 25 to 29 for 24.1% (1,046 cases).

Closer analysis of the cases reported in 1986 shows that 7,451 (79.0%) were early and that 4,344 (46.1%) of these were infectious. Only 689 (15.9%) of the infectious and 494 (15.9%) of the early latent cases were reported by private health care providers. Males accounted for 4,363 (58.6%) of the early reports for a male to female ratio of 1:1.4. Black males comprise the majority (53.7%) of infectious cases; black females represent 30.2% of the infectious cases. White males, however, only accounted for 12.4% of the infectious cases; only 3.8% of white females were reported with infectious disease.

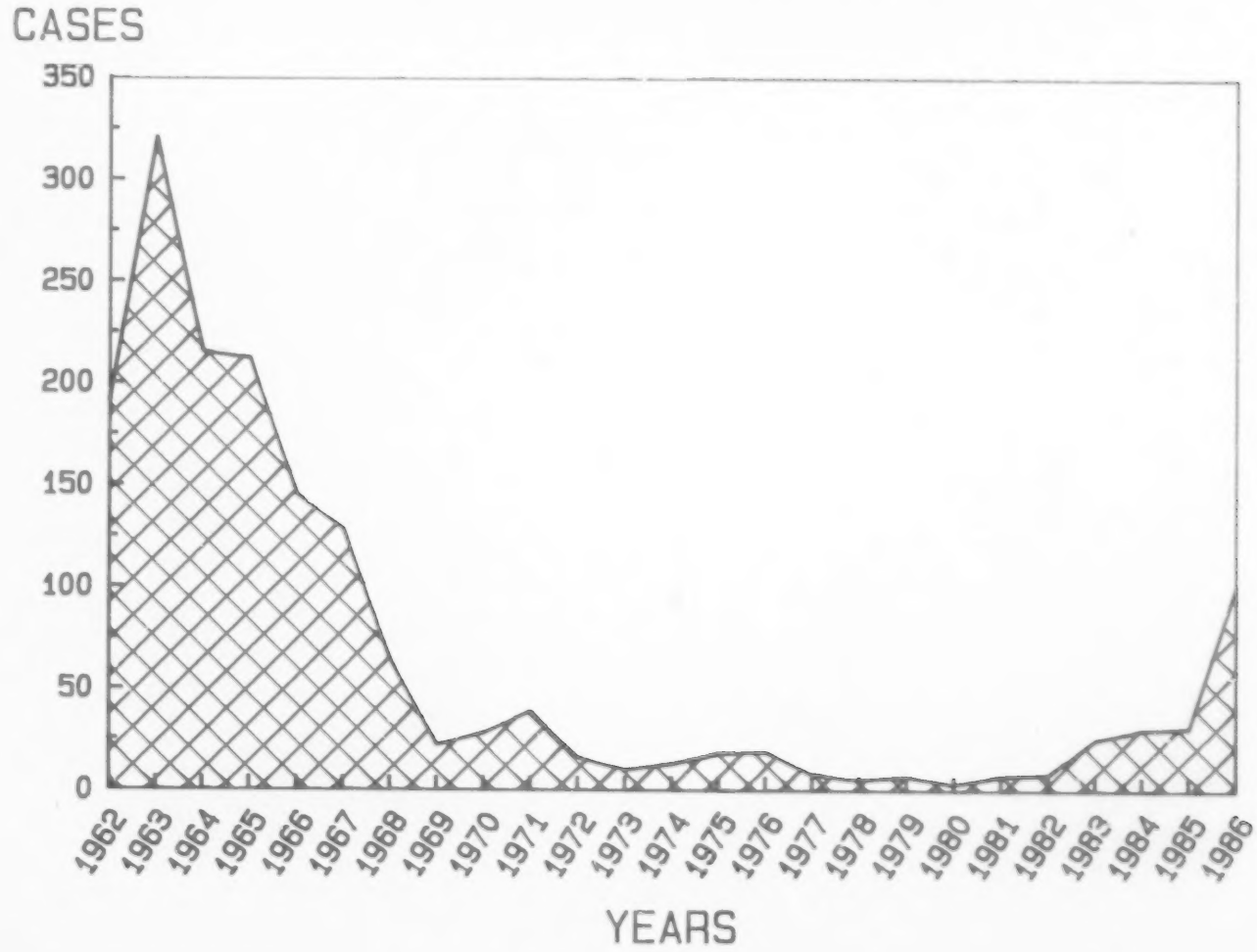
There were 100 reported cases of congenital syphilis this year. The vast majority of these cases were reported from Dade (56 cases) and Broward (25 cases) counties, accounting for 81% of the state total. Congenital syphilis was reported in 7 of the 11 HRS Districts (63.6% of the Districts), with only District 1, 2, 3, and 8 reporting no cases. Fifty-one percent of the congenital syphilis cases were males and 49% were females. With proper prenatal care, these cases could have been prevented.

Primary & Secondary SYPHILIS - Reported Cases By County, Florida, 1986 vs. 1985

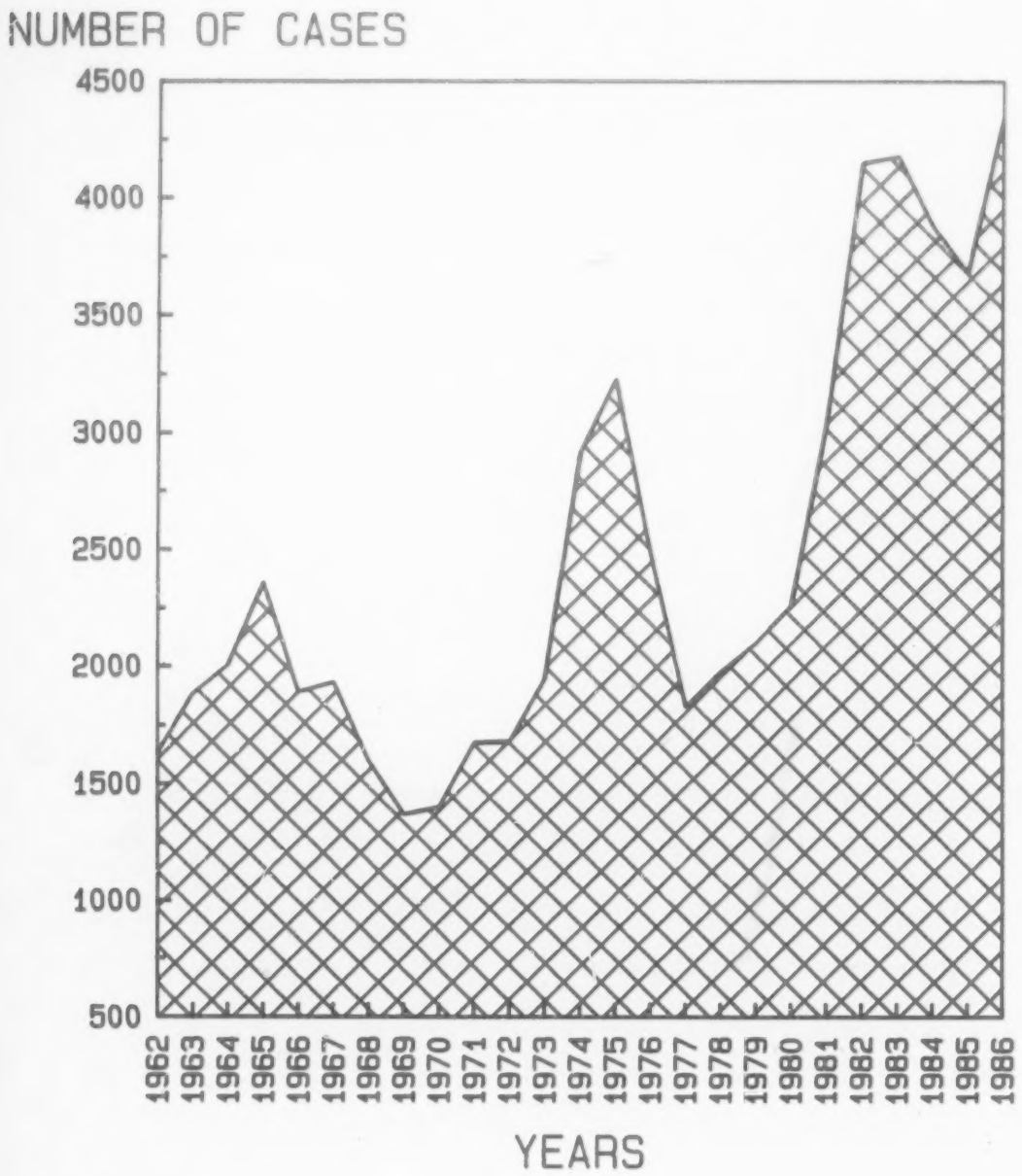
	1986	1985	%Change
District I			
Escambia	87	38	+128.9
Okaloosa	5	0	*
Santa Rosa	1	0	*
Walton	0	0	*
District II			
Bay	7	8	-12.5
Calhoun	0	0	*
Franklin	0	0	*
Gadsden	34	11	+209.1
Gulf	0	0	*
Holmes	0	0	*
Jackson	3	1	+200.0
Jefferson	1	0	*
Leon	47	47	0.0
Liberty	0	0	*
Madison	3	1	+200.0
Taylor	12	2	+500.0
Wakulla	0	1	-100.0
Washington	2	1	+100.0
District III			
Alachua	84	30	+180.0
Bradford	3	3	0.0
Citrus	0	0	*
Columbia	16	18	-11.1
Dixie	2	0	*
Gilchrist	0	0	*
Hamilton	5	6	-16.7
Hernando	1	3	-66.7
Lafayette	2	0	*
Lake	11	19	-42.1
Levy	7	1	+600.0
Marion	14	16	-12.5
Putnam	22	30	-26.7
Sumter	1	0	*
Suwannee	6	4	+50.0
Union	0	0	*
District IV			
Baker	2	0	*
Clay	0	3	-100.0
Duval	240	154	+55.8
Flagler	2	0	*
Nassau	1	1	0.0
St. Johns	10	11	-9.1
Volusia	72	60	+20.0
District V			
Pasco	6	8	-25.0
Pinellas	130	117	+11.1
District VI			
Hardee	1	3	-66.7
Highlands	9	16	-43.8
Hillsborough	157	248	-36.7
Manatee	43	29	+48.3
Polk	49	50	-2.0
District VII			
Brevard	80	82	-2.4
Orange	364	270	+34.8
Osceola	12	7	+71.4
Seminole	29	46	-37.0
District VIII			
Charlotte	0	2	-100.0
Collier	32	55	-41.8
DeSoto	4	5	-20.0
Glades	0	0	*
Hendry	3	4	-25.0
Lee	97	87	+11.5
Sarasota	15	21	-28.6
District IX			
Indian River	11	8	+37.5
Martin	12	7	+71.4
Okeechobee	14	9	+55.6
Palm Beach	429	290	+47.9
St. Lucie	74	73	+1.4
District X			
Broward	821	621	+32.2
District XI			
Dade	1209	1129	+7.1
Monroe	12	1	+1100.0
Institutions	28	22	+27.3
STATE TOTAL	4344	3679	+18.1

*Percent calculation cannot be made. No prior period morbidity was reported.

CONGENITAL SYPHILIS, REPORTED CASES
FLORIDA, 1962-1986



PRIMARY & SECONDARY SYPHILIS REPORTED CASES FLORIDA, 1962-1986



GONORRHEA

Morbidity Trends

In 1986, there were 67,443 cases of gonorrhea reported in Florida, a 17.0% increase over 1985. This figure, however, represents the largest number of reported gonorrhea cases in Florida for nearly 30 years. Gonorrhea cases in Florida had remained above the 60,000 case level from 1977 through 1982, dropping below this mark from 1983 through 1985 and now again rising above this mark in 1986. Cases reported over the last ten years have ranged from a high of 67,443 this year to a low of 51,212 in 1984. The case rate per 100,000 for 1986 is 574.2 an increase of 13.3% over the 1985 case rate of 506.7. The screening program to detect asymptomatic females has also had an impact on the gonorrhea case rate trend.

While gonorrhea cases for 1986 rose only slightly, penicillinase-producing Neisseria gonorrhoeae (PPNG) has steadily increased over the past six years from 15 cases in 1980 to 4,165 cases in 1985 and 5,629 cases in 1986. Despite vigorous efforts to control its incidence, 1986 cases rose 35.2% over 1985. The top three counties with PPNG infection are Dade (2,658 cases), Broward (454 cases), and Duval (405 cases). Together these counties represent 62.3% of the PPNG in Florida. Statewide, reported PPNG represents 8.4% of the total gonorrhea reported.

In 1986, 27,445 women were reported with gonorrhea in Florida, and 9.0% were found to have gonococcal pelvic inflammatory disease (GPID). Specifically, there were 2,473 cases reported in 1986. This represents a 6.4% increase over 2,324 cases reported in 1985. Priorities continue to be maintained in detecting young females diagnosed with GPID and identifying sex contacts for referral, examination, and treatment.

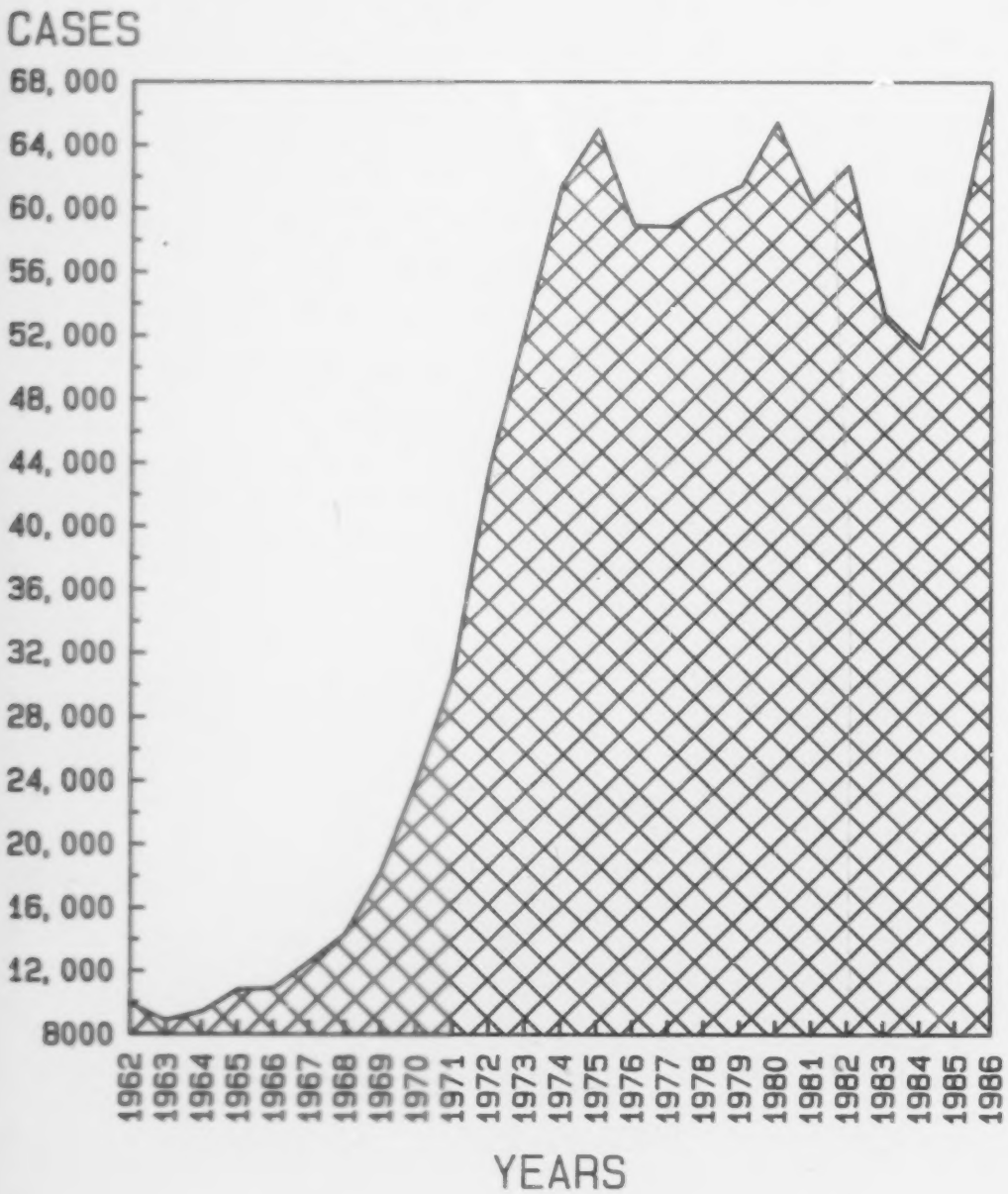
During 1986, 39,998 men (59.3% of total cases) were reported with gonorrhea in Florida. The typical infected male is between 20 and 29 years of age (53.8%), black (75.9%), heterosexual, and resides in the innercity neighborhoods, where morbidity is highest.

GONORRHEA - Reported Cases By County, Florida, 1986 vs. 1985

	1986	1985	%Change
District I			
Escambia	1707	2353	-27.5
Okaloosa	226	256	-11.7
Santa Rosa	90	61	+47.5
Walton	19	32	-40.6
District II			
Bay	429	467	-8.1
Calhoun	37	9	+311.1
Franklin	11	20	-45.0
Gadsden	536	452	+18.6
Gulf	31	14	+121.4
Holmes	25	7	+257.1
Jackson	70	90	-22.2
Jefferson	111	58	+91.4
Leon	2195	1968	+11.5
Liberty	13	7	+85.7
Madison	129	62	+108.1
Taylor	111	83	+33.7
Wakulla	21	28	-25.0
Washington	39	51	-23.5
District III			
Alachua	1269	1301	-2.5
Bradford	93	67	+38.8
Citrus	102	74	+37.8
Columbia	309	270	+14.4
Dixie	43	33	+30.3
Gilchrist	4	4	0.0
Hamilton	119	86	+38.4
Hernando	123	164	-25.0
Lafayette	2	7	-71.4
Lake	525	403	+30.3
Levy	41	45	-8.9
Marion	864	799	+8.1
Putnam	221	221	0.0
Sumter	163	202	-19.3
Suwannee	86	64	+34.4
Union	24	19	+26.3
District IV			
Baker	27	45	-40.0
Clay	174	205	-15.1
Duval	6372	6676	-4.6
Flagler	55	53	+3.8
Nassau	131	116	+12.9
St. Johns	212	253	-16.2
Volusia	1022	1022	0.0

	1986	1985	%Change
District V			
Pasco	308	256	+20.3
Pinellas	4128	3604	+14.5
District VI			
Hardee	44	95	-53.7
Highlands	322	148	+117.6
Hillsborough	6203	4585	+35.3
Manatee	1546	1451	+6.5
Polk	2759	1494	+84.7
District VII			
Brevard	1198	947	+26.5
Orange	5018	4611	+8.8
Osceola	218	192	+13.5
Seminole	886	623	+42.2
District VIII			
Charlotte	69	51	+35.3
Collier	566	508	+11.4
DeSoto	109	89	+22.5
Glades	11	12	-8.3
Hendry	52	67	-22.4
Lee	1524	1354	+12.6
Sarasota	847	877	-3.4
District IX			
Indian River	598	688	-13.1
Martin	281	138	+103.6
Okeechobee	50	72	-30.6
Palm Beach	4007	3312	+21.0
St. Lucie	1102	885	+24.5
District X			
Broward	5492	4804	+14.3
District XI			
Dade	11993	8135	+47.4
Monroe	185	394	-53.0
Institutions	146	108	+35.2
STATE TOTAL	67443	57647	+17.0

GONORRHEA-CASES REPORTED
FLORIDA, 1962-1986

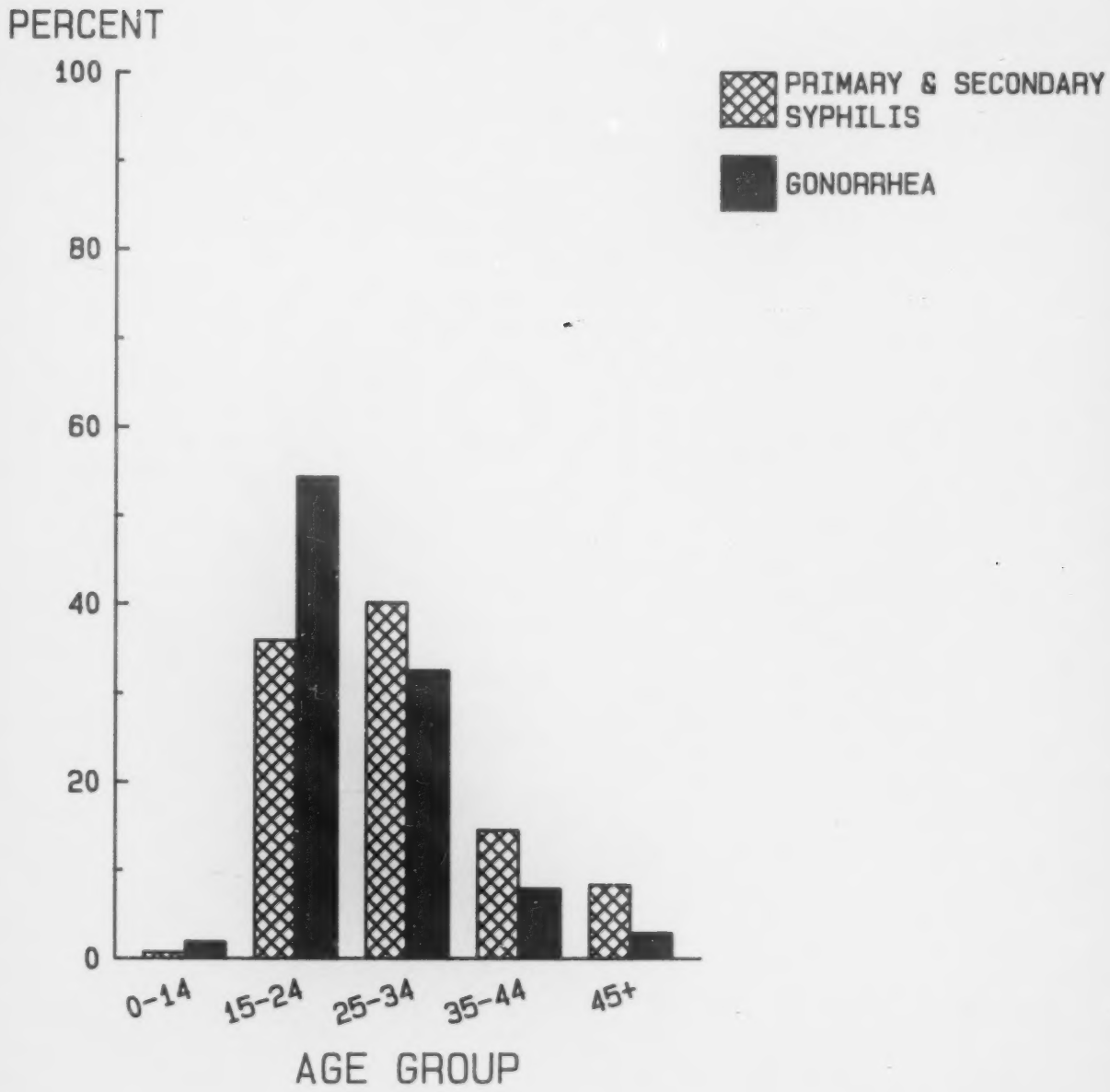


REPORTED SYPHILIS AND GONORRHEA CASES AND RATES PER 100,000 POPULATION, FLORIDA, 1957 - 1986

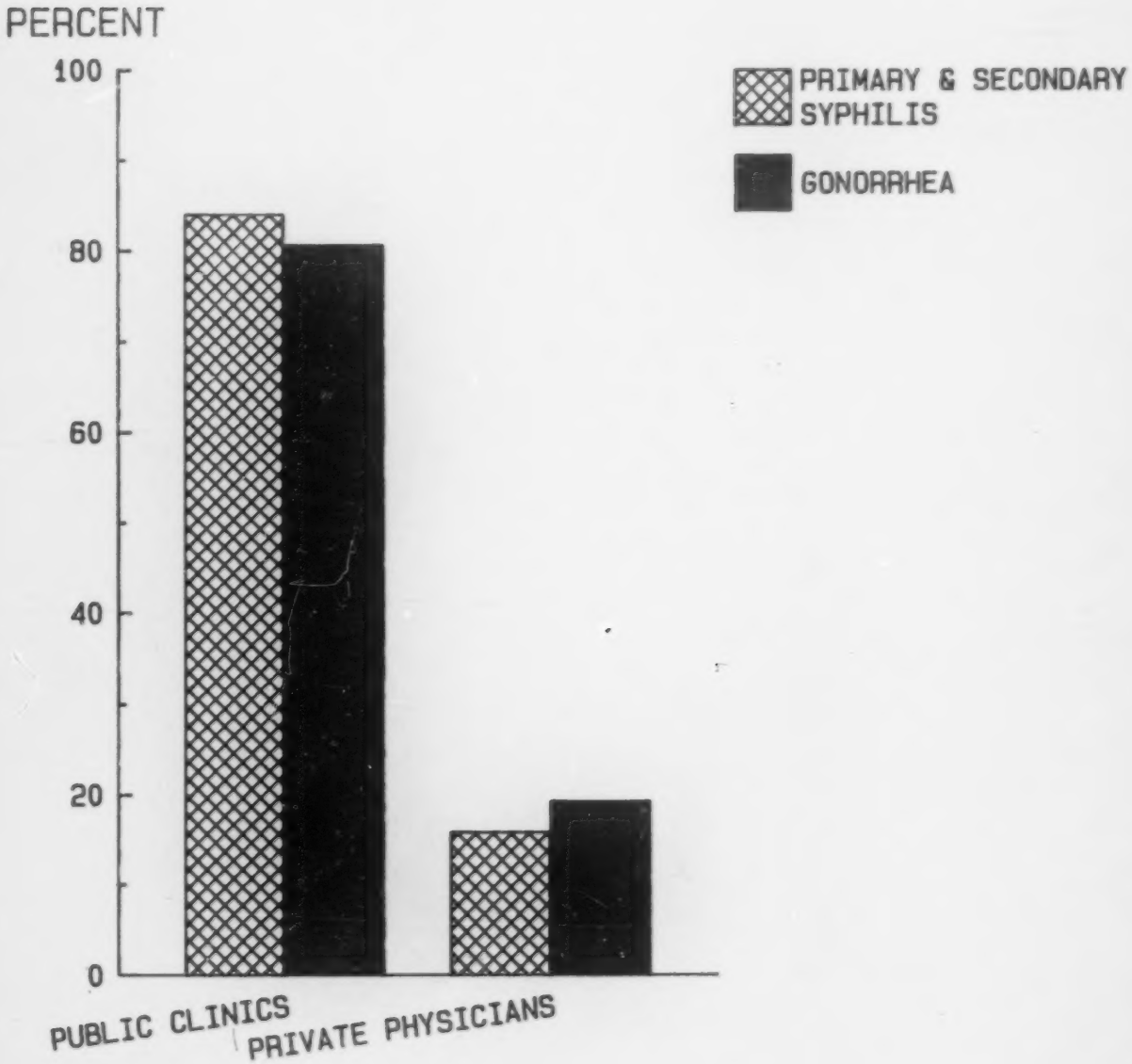
Year	Population	Total Syphilis		Primary & Secondary		Early Latent		Late & Late Latent		Congenital		Gonorrhea	
		Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
1986	11,744,900	9,427	80.3	4,344	37.6	3,107	26.9	1,876	16.2	100	0.9	67,443	574.2
1985	11,377,318	7,969	70.0	3,679	32.3	2,504	22.0	1,755	15.4	31	0.27	57,647	506.7
1984	11,015,061	8,314	75.5	3,876	35.2	2,812	25.5	1,596	14.5	30	0.27	51,212	465.0
1983	10,645,793	8,404	79.0	4,179	39.3	2,501	23.5	1,699	16.0	25	0.24	53,370	501.7
1982	10,555,498	7,936	75.2	4,149	39.3	1,884	17.9	1,895	18.0	8	0.08	62,702	595.7
1981	10,108,564	5,971	59.1	3,036	30.0	1,376	13.6	1,552	15.4	7	0.07	60,354	597.0
1980	9,813,706	4,384	44.7	2,257	23.0	1,066	10.9	1,058	10.8	3	0.03	65,437	666.8
1979	9,294,250	4,567	49.1	2,099	22.6	1,297	14.0	1,164	12.5	7	0.08	61,427	660.9
1978	8,966,395	4,648	51.8	1,978	22.1	1,350	15.1	1,315	14.7	5	0.06	60,382	673.4
1977	8,717,334	4,543	52.1	1,828	21.0	1,957	22.4	750	8.6	8	0.1	58,843	675.0
1976	8,551,814	5,528	64.6	2,481	29.0	2,154	25.2	874	10.2	19	0.2	58,921	689.0
1975	8,485,230	6,328	74.6	3,228	38.0	1,981	23.3	1,101	13.0	18	0.2	65,031	766.4
1974	8,248,851	5,518	66.9	2,915	35.3	1,624	19.7	966	11.7	13	0.2	61,507	745.6
1973	7,845,100	4,339	55.3	1,946	24.8	1,227	15.6	1,156	14.7	10	0.1	52,582	670.3
1972	7,441,500	3,692	49.6	1,680	22.6	1,189	16.0	807	10.8	16	0.2	43,688	587.1
1971	7,024,600	3,651	52.0	1,675	23.8	1,156	16.5	781	11.1	39	0.6	30,659	436.5
1970	6,841,500	2,983	43.6	1,398	20.4	990	14.5	567	8.3	28	0.4	24,089	352.1
1969	6,651,400	3,147	47.3	1,368	20.6	868	13.0	889	13.4	22	0.3	18,257	274.5
1968	6,468,700	3,615	55.9	1,595	24.7	898	13.9	1,058	16.3	64	1.0	14,331	221.5
1967	6,287,000	4,378	69.6	1,933	30.7	861	13.7	1,456	23.2	128	2.0	12,563	199.8
1966	6,105,900	5,699	93.3	1,890	30.9	972	15.9	2,692	44.1	145	2.4	10,884	178.3
1965	5,924,700	6,132	103.5	2,356	39.8	1,037	17.5	2,527	42.6	212	3.6	10,803	182.3
1964	5,743,000	5,908	102.9	2,005	34.9	1,011	17.6	2,667	46.6	215	3.8	9,402	163.7
1963	5,560,100	6,945	124.9	1,883	33.8	999	18.0	3,742	67.3	321	5.8	8,867	159.5
1962	5,375,600	6,004	111.7	1,632	30.4	1,505	28.0	2,676	49.8	191	3.5	9,902	165.6
1961	5,188,900	5,324	102.6	1,118	21.6	1,561	30.0	2,493	48.0	152	2.9	10,215	196.9
1960	4,999,000	4,115	82.3	639	12.8	1,047	20.9	2,254	45.1	175	3.5	11,122	222.5
1959	4,790,000	4,332	90.4	344	7.2	916	19.1	2,875	60.0	197	4.1	11,172	233.2
1958	4,571,000	3,186	69.7	201	4.4	741	16.2	2,056	45.0	188	4.1	10,329	240.5
1957	4,245,000	5,514	129.9	213	5.0	1,068	25.2	3,971	93.5	262	6.2	9,725	229.1

* Beginning in 1978 the early latent syphilis category is limited to latent infections under 1 year's duration. The infections over 1 year's duration are now classified as late and late latent.

GONORRHEA & INFECTIOUS SYPHILIS CASES REPORTED BY AGE GROUP FLORIDA, 1986



GONORRHEA & INFECTIOUS SYPHILIS CASES REPORTED BY SOURCE FLORIDA, 1986



SECTION 7:

Summary of Tuberculosis

Prepared by Tuberculosis Control Program
Marianne B. McEuen, M.D., Director

TUBERCULOSIS

Trends

In 1986, Florida continued as in 1985 to rank 10th highest among the 50 states with a tuberculosis case rate of 12.7 per 100,000. Thus Florida continues to have one of the highest tuberculosis case rates in the United States. There were 1,478 cases of tuberculosis reported in Florida in 1986, representing a 3.6% increase over the 1,425 cases in 1985. This represents a 1.6% increase in the rate per 100,000 population (Table 1). This is the second consecutive year that both the number of tuberculosis cases and the tuberculosis rate have increased. This upward trend in tuberculosis morbidity is predicted to continue as the result of the increasing incidence of AIDS and HIV infection. AIDS and TB surveillance over the past several years in Florida have shown that 10% of AIDS cases develop tuberculosis.

Race, Sex, and Age

The race and sex distribution remains essentially unchanged for 1986. The highest number of reported cases occurred among non-white males, age 25-44 (Table 2). Non-white females in that same age group accounted for more than twice the number of cases reported among white females. The case rate per 100,000 in the non-white population was 46.4 while the white population rate was 6.9 (Table 3). Overall, males accounted for 70.4% of the

new cases while females accounted for 29.6%. Persons under age 25 accounted for 12.6% of the reported cases representing an increase of 29.9% over the 9.7% reported for this age group in 1985. Nationally the distribution of cases since 1981 has been highest among the 65 and above age group (29.2%), whereas in Florida the 45-64 age group contributed the highest percent of cases until 1986 when the 25-44 age group accounted for the highest, (34.5%) (Figure 1).

Case rates vary widely according to age, race and sex. The rate of 149.6 for non-white males age 45-64 is highest and contrasts to the rate of 4.0 for white females of the same age group. For all persons the case rate is highest between age 45 and 64 years old (Figure 2). With the exception of the youngest age group (0-4), the rate for non-white males is highest, non-white females next highest, followed in order by white males and white females (Table 3).

Bacteriologic Confirmation

Bacteriologic results were available at the time of reporting for 1,422 (96.2%) of the 1,478 cases reported in 1986. 1,362 cases (92.2%) were reported with positive culture and 60 (4.0%) were negative. Bacteriologic results were not available for 56 cases (3.8%) (Figure 3).

Site of Disease

Pulmonary tuberculosis was reported for 1,283 (86.8%) of the cases during 1986. Extra-pulmonary tuberculosis accounted for 195 (13.2%) of the total cases reported (Table 4). From 1977-1986 reported pulmonary tuberculosis cases decreased 13.8% from 1,489 to 1,283 (Figure 4), however, extra-pulmonary tuberculosis cases increased 38.3% from 141 to 195.

Tuberculosis Associated with AIDS

Figure 6 shows the 203 AIDS/TB cases by year of tuberculosis report. The number of such cases increased over time from 1 or 2 cases in 1978-1980 to 55 cases in 1986. Of the 2,459 AIDS cases reported through 1986 in Florida, 8.3% have also been diagnosed as having tuberculosis. Because of the interval between the tuberculosis case report and AIDS diagnosis it is estimated that an additional 2 to 3 percent of the AIDS cases reported through 1986 will develop tuberculosis during the following year.

The fact that 8.3% of AIDS patients in Florida have had tuberculosis suggests that the immunosuppression caused by human T-lymphotrophic virus type III/lymphodenopathy associated virus (HTLV-III/LAV) infection results in the progression of tuberculosis from latent infection to disease.

In addition to the high rate of tuberculosis in confirmed AIDS cases, the rate of tuberculosis in HIV infected, but not AIDS confirmed, is estimated to be extremely high. For example, in Dade County, in 1986, 31% (31/105) of patients with active tuberculosis were infected with HIV. Before the advent of AIDS, tuberculosis in Florida showed a steady annual decline in case rate. For the three years prior to 1985 the rate declined an average of 6.5% per year. In 1985 tuberculosis rate increased 2.5% and in 1986 it increased 1.6%.

Geographic Distribution

Tuberculosis case rates for 1986 by HRS District ranged from 20.8 in District XI to 5.1 in District I. The rate increased in 30 counties, remained unchanged in 4, and decreased in 33 counties (Table 5, Figure 5).

Only eight of Florida's 67 counties did not report any cases in 1986. In 1986 as in 1985, the majority (68.7%) of new cases were reported from eight large metropolitan areas (Dade, Hillsborough, Broward, Palm Beach, Duval, Polk, Orange and Pinellas counties). These eight counties reported 1,016 of the 1,478 cases reported during the year. Of these eight counties, only Dade was among the 10 Florida counties having the highest case rate per 100,000 population. Twenty-four counties had case rates above the state average of 12.6 and 43 counties recorded rates less than 12.5 per 100,000 (Table 5).

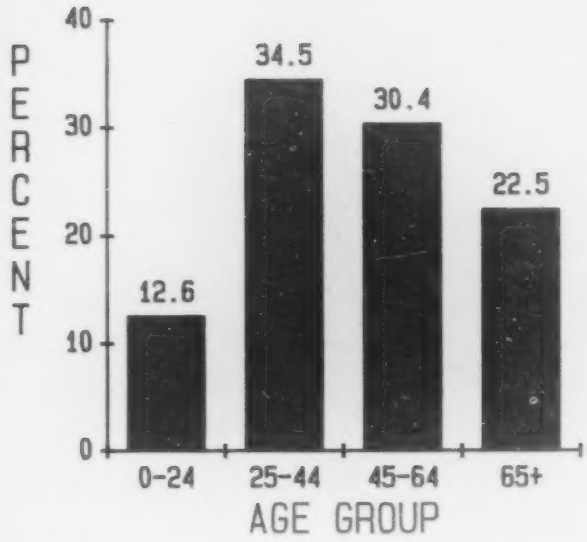
TABLE 1

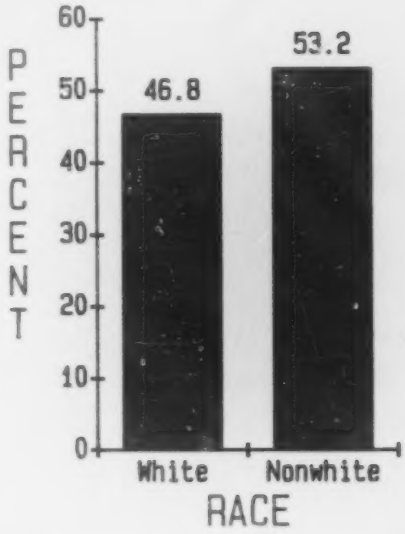
TUBERCULOSIS - Reported Cases and Rates per 100,000 Population, United States and Florida, 1975-1986

YEAR	United States				Florida			
			Percent Change				Percent Change	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1975	33,989	15.9	----	----	1,758	21.0	----	----
1976	32,105	15.0	-5.5	-5.7	1,630	19.4	-7.3	-7.6
1977	30,145	13.9	-6.1	-7.3	1,674	19.8	+2.6	+2.0
1978	28,521	13.1	-5.4	-5.8	1,724	20.1	+2.9	+1.5
1979	27,669	12.6	-3.0	-3.0	1,628	18.4	-5.6	-8.5
1980	27,749	12.3	+0.3	-2.4	1,647	16.9	+1.2	-8.2
1981	27,373	11.9	-1.4	-3.3	1,553	15.3	-5.7	-9.5
1982	25,728	11.1	-6.1	-6.7	1,467	13.9	-5.5	-9.2
1983	23,846	10.2	-6.6	-8.1	1,457	13.9	-0.7	-0.9
1984	22,255	9.4	-9.0	-7.8	1,335	12.2	-8.4	-1.0
1985	22,201	9.3	-0.2	-1.1	1,425	12.5	+6.7	+2.5
1986	22,768	9.4	+2.6	+1.1	1,478	12.7	+3.6	+1.6

FIGURE 1

TUBERCULOSIS - REPORTED CASES BY AGE, RACE AND SEX, FLORIDA, 1986





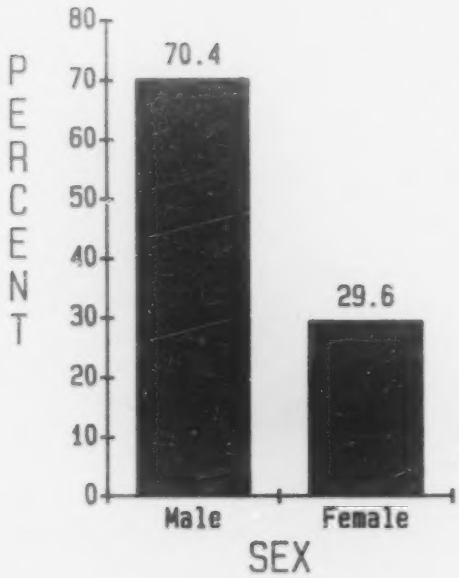


TABLE 2

TUBERCULOSIS - Reported Cases By Age, Race and Sex, Florida, 1986

AGE	TOTAL	WHITE			NON-WHITE		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
All Ages	1,478	691	488	203	787	552	325
0-4	41	13	6	7	28	14	14
5-14	20	7	4	3	13	8	5
15-24	125	40	27	13	85	45	40
25-44	510	167	123	44	343	248	95
45-64	449	228	181	47	221	174	47
65+	333	236	147	89	97	63	34

FIGURE 2

TUBERCULOSIS - Reported Case Rates By Age Groups, Florida, 1986

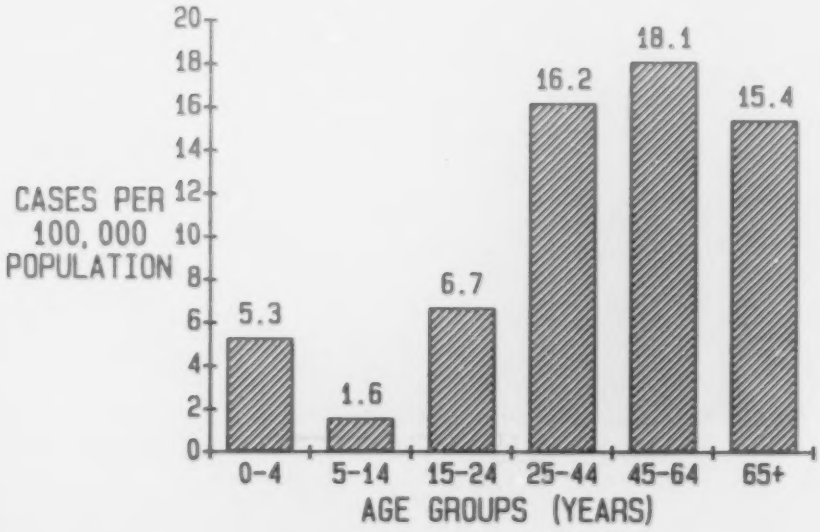


TABLE 3

TUBERCULOSIS - Reported Case Rates Per 100,000 Population By Age, Race and Sex, Florida, 1986

AGE	TOTAL	WHITE			NON-WHITE		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
0-4	5.3	2.0	2.3	1.7	15.5	14.6	16.4
5-14	1.6	0.7	0.7	0.8	4.8	6.4	3.3
15-24	6.7	2.7	3.6	1.8	23.9	26.1	21.7
25-44	16.2	6.3	9.1	3.5	71.1	112.4	35.3
45-64	18.1	10.4	17.8	4.0	86.7	149.6	35.4
65+	15.4	11.5	16.5	7.7	75.9	123.6	43.1
All Ages	12.6	6.9	10.1	3.9	46.4	68.9	26.0

FIGURE 3

TUBERCULOSIS - Reported Cases By Bacteriological Status At Time Of Report, Florida, 1986

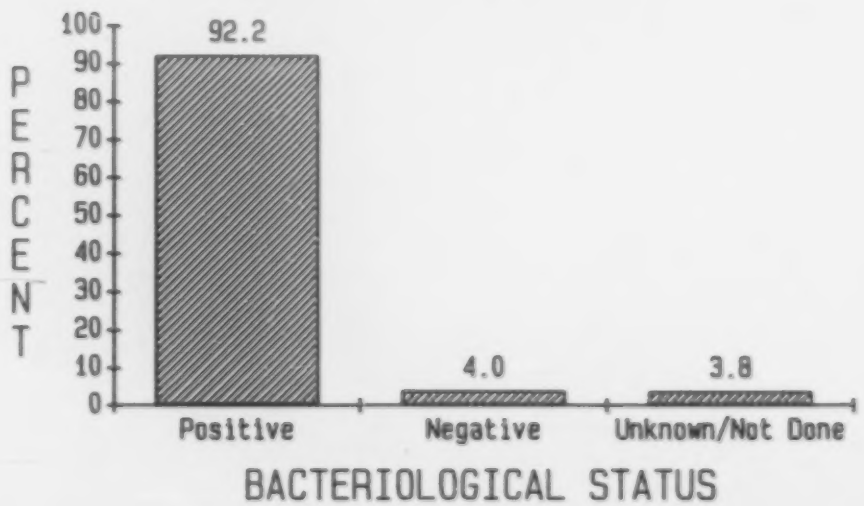


TABLE 4

TUBERCULOSIS - Reported Cases and Percent by Site of Disease, Florida, 1986

Disease Site	Reported Cases	
	Number	Percent
Pulmonary	1,283	86.8
Extra-Pulmonary		
Pleural	36	
Lymphatic	66	
Bone and/or Joint	24	
Genitourinary	17	
Miliary	13	
Meningeal	6	
Peritoneal	4	
Other	29	
Total Extra-Pulmonary	195	13.2
Total All Cases	1,478	100.0

FIGURE 4 - NUMBER OF REPORTED PULMONARY AND EXTRA-PULMONARY TUBERCULOSIS CASES, FLORIDA, 1977-1986

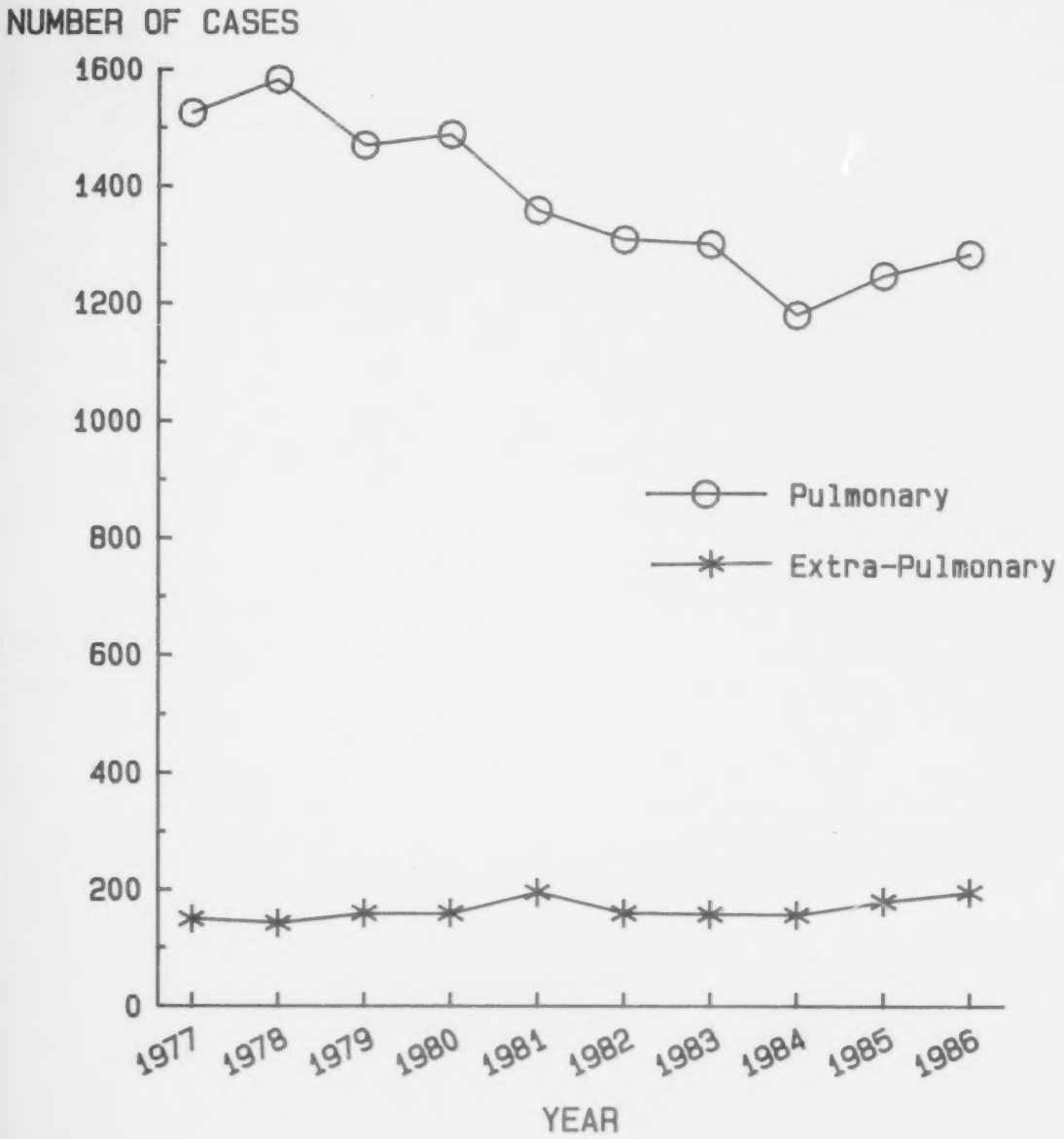


TABLE 5

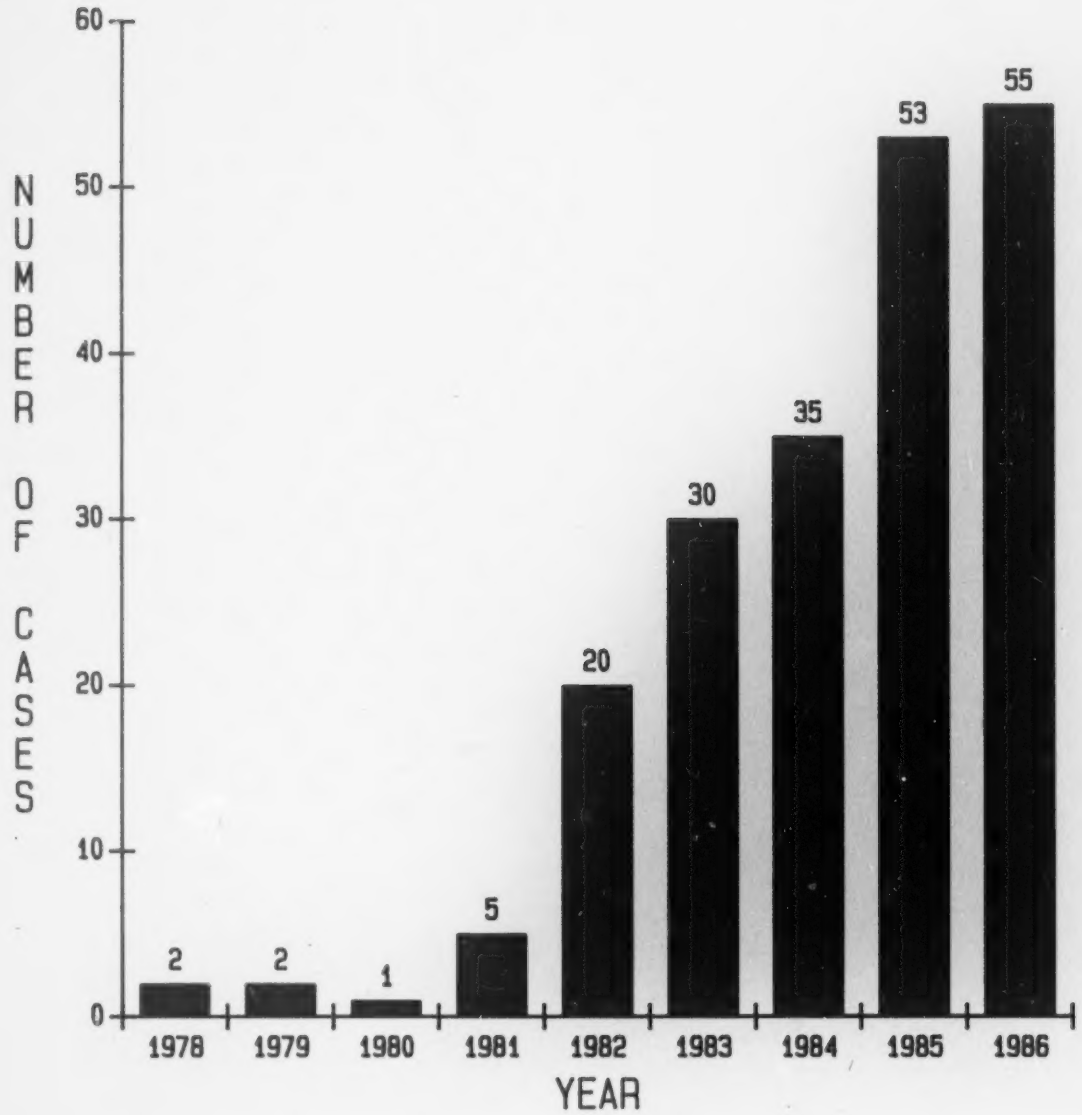
*TUBERCULOSIS - Reported Cases and Rates Per 100,000 Population, By Rank, By County, Florida, 1986

County	Number of Cases	Rate Per 100,000 Population	Rank
District I			
Escambia	21	7.7	40
Okaloosa	3	2.1	56
Santa Rosa	2	3.1	54
Walton	0	0.0	57
District II			
Bay	30	23.8	6
Calhoun	1	10.5	30
Franklin	5	58.0	1
Gadsden	10	21.8	8
Gulf	2	17.5	16
Holmes	0	0.0	57
Jackson	3	7.3	42
Jefferson	0	0.0	57
Leon	14	8.0	38
Liberty	0	0.0	57
Madison	3	19.0	13
Taylor	0	0.0	57
Wakulla	1	7.2	43
Washington	3	19.8	12
District III			
Alachua	14	7.8	39
Bradford	2	8.2	37
Citrus	2	2.6	55
Columbia	5	12.3	24
Dixie	1	10.4	31
Gilchrist	0	0.0	57
Hamilton	3	32.1	3
Hernando	4	5.4	49
Lafayette	1	21.6	9
Lake	21	16.2	19
Levy	0	0.0	57
Marion	16	9.5	33
Putnam	10	17.1	17
Sumter	5	17.6	15
Suwannee	2	7.6	41
Union	2	18.5	14
District IV			
Baker	0	0.0	57
Clay	4	4.4	53
Duval	94	14.7	21
Flagler	1	5.7	48
Nassau	7	16.7	18
St. Johns	7	9.5	33
Volusia	28	8.7	35
District V			
Pasco	14	5.7	48
Pinellas	70	8.5	36
District VI			
Hardee	11	50.8	2
Highlands	3	4.9	50
Hillsborough	144	18.5	14
Manatee	21	11.9	27
Polk	52	13.7	23
District VII			
Brevard	22	6.1	46
Orange	70	12.1	26
Osceola	4	4.7	51
Seminole	17	6.9	45
District VIII			
Charlotte	6	7.1	44
Collier	25	20.2	11
DeSoto	7	31.4	4
Glades	1	13.9	22
Hendry	6	25.1	5
Lee	30	10.6	29
Sarasota	12	4.8	51
District IX			
Indian River	9	11.1	28
Martin	5	5.8	47
Okeechobee	4	15.5	20
Palm Beach	92	12.2	25
St. Lucie	29	23.2	7
District X			
Broward	109	9.4	34
District XI			
Dade	381	21.2	10
Monroe	7	9.6	32
STATE TOTAL	1478	12.7	--

FIGURE 5

TUBERCULOSIS - Reported Cases and Case Rates Per 100,000 Population, By HRS Districts, Florida, 1986

FIGURE 6 - REPORTED AIDS CASES WHO HAVE ALSO HAD TUBERCULOSIS, BY YEAR OF TUBERCULOSIS REPORT, FLORIDA, 1978-1986 (N=203)



This publication was produced by the HRS Communicable Disease/Epidemiolgy Program at an annual cost of $2,504.25, or $4.77 per copy, to inform the public about communicable disease morbidity statistics in Florida, in accordance with Chapter 381, F.S. HRS complies with the state and federal nondiscrimination policies relating to race, sex, age and handicapping conditions.

FLORIDA MORBIDITY STATISTICS 1987

DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

BOB MARTINEZ, Governor

GREGORY L. COLER, Secretary

STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

GREGORY E. COLER
Secretary

ROBERT B. WILLIAMS
Assistant Secretary for Programs

STATE HEALTH OFFICE

CHARLES S. MAHAN, M.D.
Deputy Assistant Secretary for Health
and State Health Officer

DISEASE CONTROL

JOHN J. WITTE, M.D., M.P.H.
Assistant Health Officer

MICHAEL H. WILDER, M.D., M.S.
State Epidemiologist

WILLIAM J. BIGLER, Ph.D.
Deputy State Epidemiologist

ROBERT A. CALDER, M.D., M.S.
Medical Executive Director

KARL C. KLONTZ, M.D., M.P.H.
Medical Executive Director

MIRIAM S. BOCHNER, B.A.
Epidemiologist/Program Specialist

LAURA L. MACLAFFERTY, B.S.
Statistician

LISA A. CONTI, D.V.M.
Veterinarian

STATE HEALTH OFFICE
DISEASE CONTROL
EPIDEMIC SURVEILLANCE AND INVESTIGATION
1317 WINEWOOD BOULEVARD
TALLAHASSEE, FLORIDA 32399-0700

TABLE OF CONTENTS

Introduction v
Acknowledgements vi
Map of Florida Indicating Department of Health and Rehabilitative Services
District Boundaries and District Headquarters vii
Alphabetical List of Florida Counties with 1987 Midyear
Population Estimates and District Numbers viii

SECTION 1 - Summary of Selected Notifiable Diseases 1
Reported Cases of Selected Notifiable Diseases
by Month of Onset, Florida, 1987 3
Reported Cases of Selected Notifiable Diseases, Florida, 1978-1987 4
Reported Case Rates Per 100,000 Population for Selected
Notifiable Diseases, Florida, 1978-1987 5
Reported Cases of Notifiable Diseases of
Infrequent Occurrence, Florida, 1978-1987 6

SECTION 2 - Analysis of Selected Notifiable Diseases 7
Central Nervous System Diseases:
Encephalitis, Post-Infectious and Other 9
Encephalitis, Arthropod-Borne 12
Meningitis, Aseptic 14
Meningitis, Haemophilus influenzae type b 17
Meningitis, Meningococcal 20
Meningitis, Other Bacterial 23
Hepatitis:
Hepatitis A 26
Hepatitis B 29
Hepatitis Non-A, Non-B Associated with Blood/Blood Products 32
Hepatitis Non-A, Non-B Not Associated with Blood/Blood Products ... 35
Hepatitis Unspecified 38
Enteric Diseases:
Campylobacteriosis 42
Salmonellosis 45
Shigellosis 48
Vibrio Infections 51

SECTION 3 - Summary of Vaccine Preventable Diseases of Childhood 55
Measles (Rubeola) 57
Mumps 61
Pertussis 64
Rubella (German Measles) 68

SECTION 4 - Analysis of Animal Rabies & Zoonotic Diseases 73
Animal Rabies 75
Zoonotic Diseases 81

SECTION 5 - Summary of Acquired Immune Deficiency Syndrome 85

SECTION 6 - Summary of Sexually Transmitted Diseases 95

SECTION 7 - Summary of Tuberculosis 113

INTRODUCTION

This is the 43rd edition of the Florida Morbidity Statistics. The series begun in 1945 in order to provide a variety of users with detailed information not previously available in the State Board of Health Annual Reports. Data on the reported incidence of notifiable communicable diseases are presented in a table and figure format with narrative interpretations when appropriate. These and some unpublished records for the years 1918 through 1944 are available upon request from the Florida Department of Health and Rehabilitative Services, State Health Office Epidemiology Program.

Sources of Data

Data in this document are based on case reports furnished to HRS County Public Health Units by private physicians, hospitals, and others. Other sources of data include death certificates and laboratory reports which are checked routinely for previously unreported cases of notifiable diseases.

Each HRS County Public Health Unit designates an individual responsible for collecting, tabulating, and maintaining data on reportable notifiable diseases received from physicians and hospitals on a continuing basis. These data are initially recorded on a "Reportable Disease Control Log". From this log each HRS County Public Health Unit prepares and submits to the District Administrator and State Health Office Epidemiology Program summary reports on all cases of notifiable diseases reported to it during the past seven days. On the basis of these morbidity data received from HRS County Public Health Units, the Epidemiology Program compiles statewide statistics and makes a weekly report of certain prescribed diseases to the Centers for Disease Control (CDC).

The population figures used in calculating the case rates for certain diseases are furnished by the Office of Planning and Budgeting, Executive Office of the Governor.

Epidemiologic Investigation

Individual case reports are verified as cases of reportable disease through investigations conducted by HRS County Public Health Unit personnel. The HRS County Public Health Unit director assigns those cases to be investigated to a nurse, environmental health specialist, or other appropriate personnel for follow-up. Most cases are physician-diagnosed and have appropriate laboratory verification. Individual case investigation forms are then forwarded to the Epidemiology Program for review and, in some instances, forwarded to the CDC along with investigation reports from any outbreaks.

Report Orientation

Occurrence of cases by county is usually reported by residence of the case. Reports originating from hospitals and other places outside the ill person's county of residence are credited to the county of usual residence. Sexually transmitted diseases are reported by county of residence unless residing in an institution (i.e., prison) in which case they are attributed to an institutional, 68th category.

Computerized Data Base

The Epidemiology Program collects the data submitted and consolidates it for later analysis and interpretation. The consolidated data are forwarded to the HRS Data Center for electronic data processing purposes. The CDC is then notified by telephone of reports on selected communicable diseases. A computer printout of the electronically processed data is returned to the State Health Office Epidemiology Program.

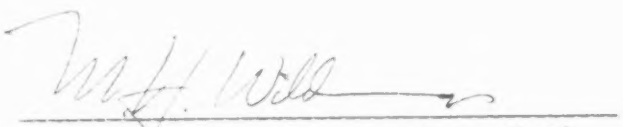
ACKNOWLEDGEMENTS

The Epidemiology Program acknowledges the important role played by Charles Hartwig, Sc.D., Director of Laboratory Services, and his staff in the Central Laboratory, the Epidemiology Research Center, and the six branch laboratories, in the prevention and control of communicable diseases. Other HRS units which contribute substantially to this overall effort are the Office of Vital Statistics and the Office of Management Systems and Computer Services.

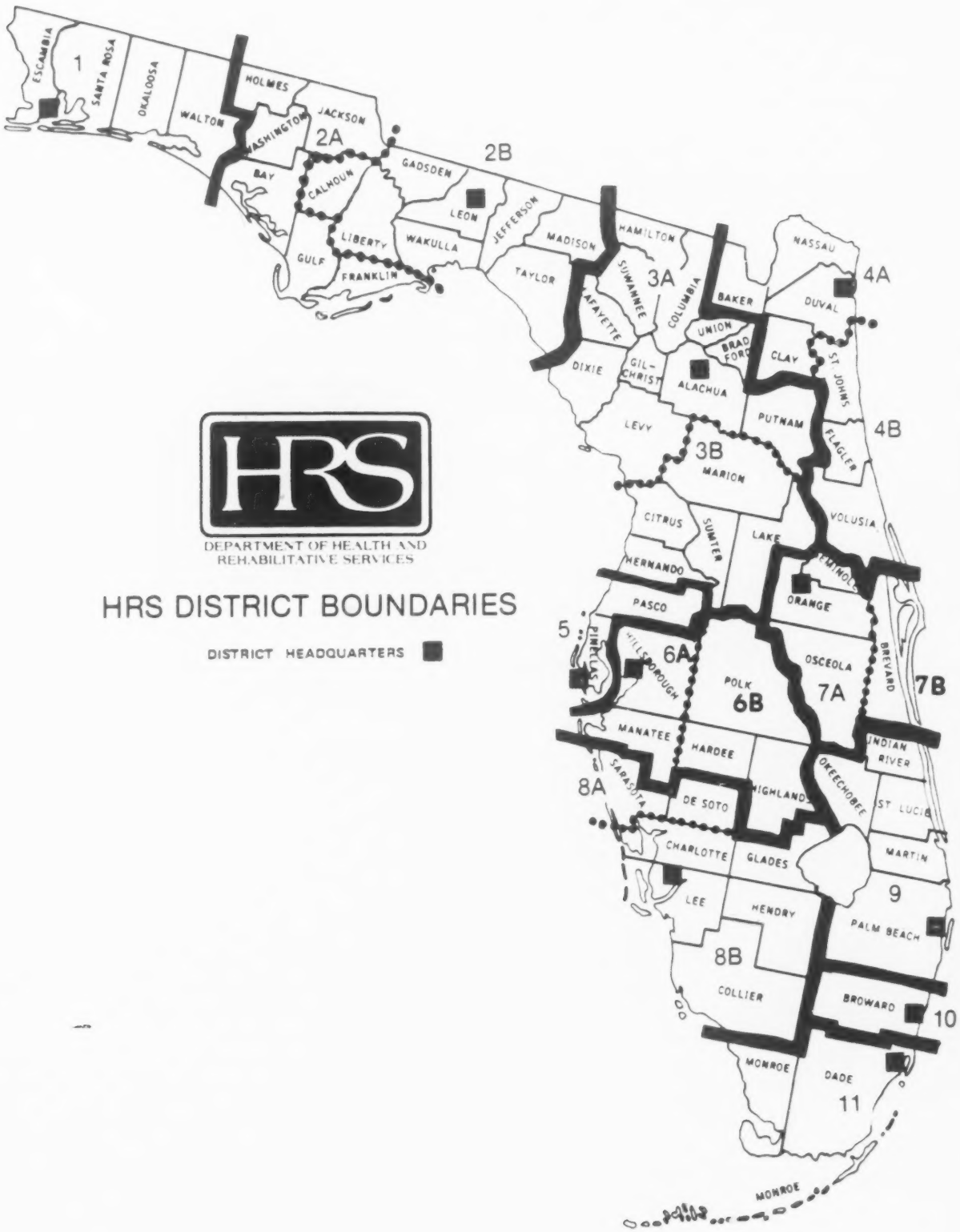
Special thanks go to Departmental employees in the Sexually Transmitted Disease, Tuberculosis, Immunization, and AIDS Programs for their efforts in the prevention, surveillance, and control of communicable diseases, especially Jack Wroten, Program Supervisor, Sexually Transmitted Disease Program, Marianne B. McEuen, M.D., Director, Tuberculosis Control Program, Henry T. Janowski, M.P.H., Program Supervisor, Immunization Program, and Joyner Sims, Ph.D., Program Administrator, AIDS Program.

Laura MacLafferty, Statistician, Communicable Disease Program, is thanked especially for her assistance in the preparation of all graphic material in this report.

Further acknowledgement is made to HRS Districts and County Public Health Units for their collective efforts in the statewide communicable disease morbidity surveillance and reporting system. The participation of physicians, hospitals, nurses, sanitarians, infection control nurses, epidemiology/communicable disease specialists, communicable disease report persons, and clerical staff is likewise greatly appreciated.



Michael H. Wilder, M.D., M.S., (Prev. Med.)
State Epidemiologist



HRS

DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

HRS DISTRICT BOUNDARIES

DISTRICT HEADQUARTERS ■

ALPHABETICAL LIST OF FLORIDA COUNTIES WITH 1987 MIDYEAR POPULATION ESTIMATES AND DISTRICT NUMBERS

COUNTY	POPULATION	DISTRICT
ALACHUA	181,959	3
BAKER	18,413	4
BAY	132,497	2
BRADFORD	24,398	3
BREVARD	376,998	7
BROWARD	1,180,465	10
CALHOUN	9,874	2
CHARLOTTE	88,486	8
CITRUS	82,277	3
CLAY	95,400	4
COLLIER	128,248	8
COLUMBIA	41,683	3
DADE	1,797,996	11
DESOTO	23,045	8
DIXIE	9,779	3
DUVAL	668,840	4
ESCAMBIA	283,128	1
FLAGLER	18,894	4
FRANKLIN	8,706	2
GADSDEN	46,956	2
GILCHRIST	7,234	3
GLADES	7,386	8
GULF	11,897	2
HAMILTON	9,421	3
HARDEE	22,431	6
HENDRY	24,437	8
HERNANDO	80,214	3
HIGHLANDS	63,035	6
HILLSBOROUGH	809,733	6
HOLMES	16,510	2
INDIAN RIVER	84,469	9
JACKSON	43,285	2
JEFFERSON	11,946	2
LAFAYETTE	4,740	3
LAKE	136,524	3
LEE	294,308	8
LEON	178,187	2
LEVY	23,819	3
LIBERTY	4,632	2
MADISON	15,976	2
MANATEE	182,104	6
MARION	177,181	3
MARTIN	88,218	9
MONROE	74,883	11
NASSAU	43,983	4
OKALOOSA	150,922	1
OKEECHOBEE	27,939	9
ORANGE	606,591	7
OSCEOLA	90,031	7
PALM BEACH	791,546	9
PASCO	256,729	5
PINELLAS	838,907	5
POLK	391,623	6
PUTNAM	60,506	3
ST. JOHNS	78,365	4
ST. LUCIE	128,709	9
SANTA ROSA	67,108	1
SARASOTA	255,023	8
SEMINOLE	256,827	7
SUMTER	29,661	3
SUWANNEE	26,567	3
TAYLOR	18,657	2
UNION	10,983	3
VOLUSIA	333,818	4
WAKULLA	14,397	2
WALTON	27,797	1
WASHINGTON	15,499	2
STATE TOTAL*	12,112,800	

*State population increased 3.13 percent from 1986.

Population figures based on data furnished by Office of Planning and Budgeting, Executive Office of the Governor.

SECTION 1:

Summary of Selected Notifiable Diseases

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, FLORIDA, 1987

DISEASES	Totals	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
Amebiasis	62	5	1	6	3	5	2	1	2	4	1	1	1	30
Encephalitis, Post-Infectious & Other (excluding arthropod-borne)	47	3	2	4	8	4	4	7	1	4	3	5	1	1
Hepatitis A	729	53	62	64	47	67	70	65	57	43	63	44	44	50
Hepatitis B	1563	106	129	150	106	105	96	92	105	96	111	114	99	254
Hepatitis NANB Asso. w/Blood or Blood Products	57	7	5	4	4	7	3	5	2	2	4	5	4	5
Hepatitis NANB Not Asso. w/Blood/Blood Products	98	11	5	12	5	12	7	8	8	10	7	6	4	3
Hepatitis, Unspecified	100	5	11	6	9	6	11	10	9	5	2	6	5	15
Legionnaires' Disease	27	3	3	2	3	2	5	2	4	0	3	0	0	0
Malaria	39	2	4	3	2	4	4	2	8	0	4	1	4	1
Measles (Rubeola)	126	2	3	24	19	1	27	7	11	2	19	8	3	0
Meningitis, Aseptic	665	36	42	33	34	55	86	97	96	64	29	44	24	25
Meningitis, Haemophilus Influenzae type b	420	46	38	32	38	33	28	27	17	33	41	35	45	7
Meningitis, Meningococcal	117	16	17	10	11	11	6	5	2	5	12	8	12	2
Meningitis, Other Bacterial	334	25	25	35	26	29	39	24	18	20	23	19	28	23
Mumps	67	2	7	12	6	8	1	5	3	4	10	7	2	0
Pertussis	53	1	2	1	4	5	5	5	17	5	4	2	2	0
Rubella (Excluding Congenital)	10	1	3	1	1	0	0	0	1	1	0	2	0	0
Salmonellosis	2960	156	122	150	156	196	248	305	378	379	302	241	174	153
Shigellosis	818	45	46	52	49	58	121	112	78	65	57	61	25	49

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES, FLORIDA, 1978-1987

DISEASES	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Encephalitis, Post-Infectious & Other (excluding arthropod-borne)	47	43	63	77	80	98	69	80	67	98
Hepatitis A	729	1268	1028	779	961	1123	1509	2278	1883	1755
Hepatitis B	1563	1659	1728	1593	1398	1356	1512	1222	981	966
Hepatitis NANB Asso. w/Blood or Blood Products	57	72	106	98	56	75	74	51	82	+
Hepatitis NANB Not Asso. w/Blood/Blood Products	98	171	250	243	196	183	105	+	+	+
Hepatitis, Unspecified	100	172	291	248	295	477	530	788	741	583
Gonorrhea	62944	67443	57647	51212	53370	62702	60354	65437	61427	60382
Legionnaires' Disease	27	38	20	13	23	28	22	12	47	+
Malaria	39	49	38	33	31	35	49	86	32	40
Measles (Rubeola)	126	400	117	30	159	246	345	432	938	1203
Meningitis, Aseptic	665	713	592	487	588	873	673	654	319	311
Meningitis, Haemophilus Influenzae type b	420	396	423	408	333	337	N/A	N/A	N/A	N/A
Meningitis, Meningococcal	117	102	108	150	124	147	256	218	203	232
Meningitis, Other Bacterial	334	345	301	360	325	667	551	487	424	+
Mumps	67	62	61	47	26	48	145	195	216	318
Pertussis	53	82	75	91	57	59	78	68	51	62
Rubella (Excluding Congenital)	10	12	30	28	70	32	67	109	318	214
Salmonellosis	2960	3160	2513	1859	2332	2637	2194	2031	1853	1624
Shigellosis	818	800	1317	1032	700	585	784	927	808	857
Syphilis (All Stages)	15666	9427	7969	8314	8404	7936	5971	4384	4567	4648
Tuberculosis	1586	1478	1425	1335	1457	1467	1553	1647	1628	1724
Typhoid Fever	16	10	20	18	19	21	27	16	23	19

+Not Reported This Year

N/A Data Not Available

REPORTED CASE RATES PER 100,000 POPULATION FOR SELECTED NOTIFIABLE DISEASES, FLORIDA, 1978-1987

DISEASES	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Encephalitis, Post-Infectious & Other (excluding arthropod-borne)	0.4	0.4	0.5	0.7	0.8	0.9	0.7	0.8	0.7	1.1
Hepatitis A	6.0	10.8	9.0	7.1	9.0	10.6	14.8	23.2	20.3	19.6
Hepatitis B	12.9	14.1	15.2	14.5	13.1	12.8	14.8	12.5	10.6	10.8
Hepatitis NANB Asso. w/Blood or Blood Products	0.5	0.6	0.9	0.9	0.5	0.7	0.7	0.5	0.9	+
Hepatitis NANB Not Asso. w/Blood/Blood Products	0.8	1.5	2.2	2.2	1.8	1.7	1.0	+	+	+
Hepatitis, Unspecified	0.8	1.5	2.6	2.3	2.8	4.5	5.2	8.0	8.0	6.5
Gonorrhea	519.6	574.2	506.7	465.0	501.7	595.7	597.0	666.8	660.9	673.4
Legionnaires' Disease	0.2	0.3	0.2	0.1	0.2	0.3	0.2	0.1	0.5	+
Malaria	0.3	0.4	0.3	0.3	0.3	0.3	0.5	0.9	0.3	0.4
Measles (Rubeola)	1.0	3.4	1.0	0.3	1.5	2.3	3.4	4.4	10.1	13.4
Meningitis, Aseptic	5.5	6.1	5.2	4.4	5.5	8.3	6.6	6.7	3.4	3.5
Meningitis, Haemophilus Influenzae type b	3.5	3.4	3.7	3.7	3.1	3.2	N/A	N/A	N/A	N/A
Meningitis, Meningococcal	1.0	0.9	1.0	1.4	1.2	1.4	2.5	2.2	2.2	2.6
Meningitis, Other Bacterial	2.8	2.9	2.7	3.3	3.1	6.3	5.4	5.0	4.6	+
Mumps	0.6	0.5	0.5	0.4	0.2	0.5	1.4	2.0	2.3	3.5
Pertussis	0.4	0.7	0.7	0.8	0.5	0.6	0.8	0.7	0.5	0.7
Rubella (Excluding Congenital)	0.1	0.1	0.3	0.3	0.7	0.3	0.7	1.1	3.4	2.4
Salmonellosis	24.4	26.9	22.1	16.9	21.9	25.0	21.5	20.7	19.9	18.1
Shigellosis	6.8	6.8	11.6	9.4	6.6	5.5	7.7	9.4	8.7	9.6
Syphilis (All Stages)	129.3	80.3	70.0	75.5	79.0	75.2	59.1	44.7	49.1	51.8
Tuberculosis	13.2	12.7	12.5	12.2	13.6	13.9	15.3	16.9	18.4	20.1
Typhoid Fever	0.1	0.1	0.2	0.2	0.2	0.6	0.3	0.2	0.2	0.2

+Not Reported This Year **N/A Data Not Available**

REPORTED CASES OF NOTIFIABLE DISEASES OF INFREQUENT OCCURRENCE, FLORIDA, 1978 - 1987

DISEASE	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	Not Reported Prior to
Botulism	3	0	0	0	0	1	1	0	0	1	1961
Brucellosis	9	7	8	13	7	10	16	7	11	10	
Cholera (Group 01)	0	1	1	0	0	1	0	0	0	0	
Congenital Rubella	0	0	0	0	0	0	1	2	4	1	1971
Dengue	2	1	0	0	0	1	13	1	0	7	
Diphtheria	0	0	0	0	0	0	1	0	0	0	
Histoplasmosis	4	0	6	3	2	3	2	1	4	1	1957
Hansen's Disease (Leprosy)	2	3	4	8	8	8	1	4	9	2	
Leptospirosis	0	1	4	2	4	8	6	11	18	22	1950
Polio	0	2	1	0	0	0	0	0	0	0	
Psittacosis	2	3	14	3	3	1	3	5	0	3	1954
Reye Syndrome	2	5	2	6	13	9	18	21	13	7	
Rocky Mt. Spotted Fever	4	2	15	2	3	5	14	9	10	12	1947
Schistosomiasis	0	2	2	3	10	3	2	3	1	0	
Tetanus	4	3	10	7	4	2	5	4	8	10	
Toxoplasmosis	4	8	12	5	11	22	25	32	6	2	1964
Tularemia	0	0	0	0	0	1	1	0	0	2	
Typhus Fever (Murine)	0	2	0	0	0	2	1	0	1	1	1946

*Other Diseases of Infrequent Occurrence and Year Last Case Reported

Anthrax (1974)
Human Rabies (1948)
Smallpox (1946)

SECTION 2:

Analysis of Selected Notifiable Diseases

ENCEPHALITIS, POST-INFECTIOUS AND OTHER

In 1987, there were 47 cases of encephalitis, post-infectious and other (excluding arthropod-borne) reported in Florida, a 9.3% increase from 1986 when 43 cases were reported. The overall incidence per 100,000 for the state population remained the same as last year (0.4).

These encephalitis cases were reported from 24 of Florida's 67 counties. The number of cases, by month of onset, indicates peak periods in April and July.

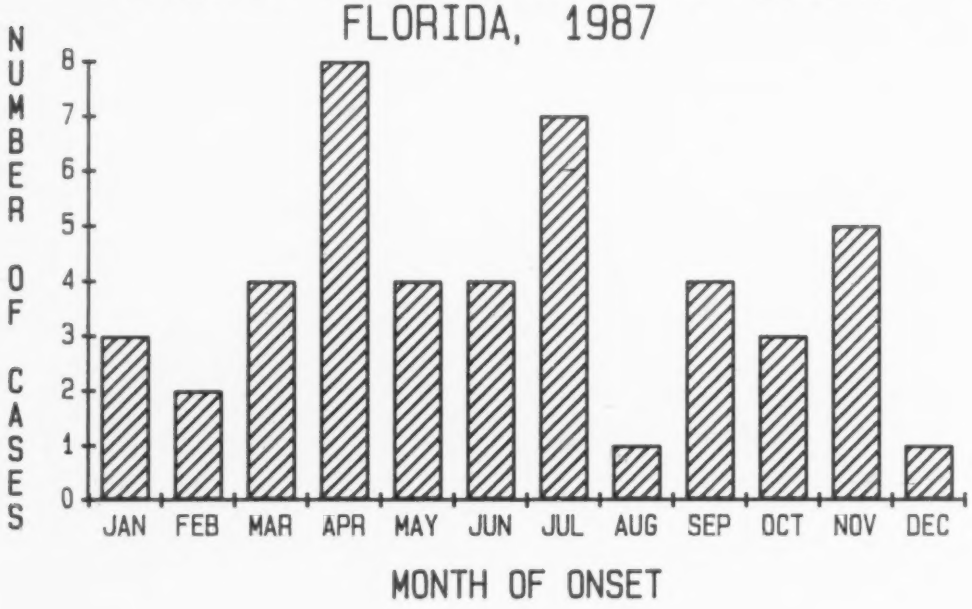
The highest age-specific incidence per 100,000 population was in those aged 1-4 years (7 cases, 1.1 per 100,000). There were no cases in the less than one year old age group.

ENCEPHALITIS, POST-INFECTIOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE) - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

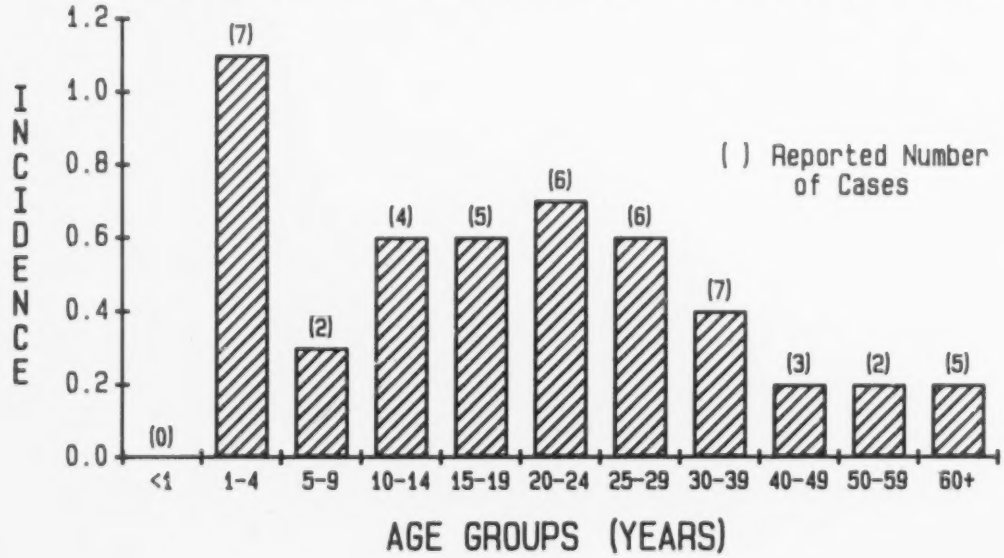
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia															0.0	0.2
	Okaloosa				1		1	1		1					4	2.6	0.2
	Santa Rosa			1				1							2	3.0	0.0
	Walton				1										1	3.6	0.0
II	Bay		1			1									2	1.5	3.8
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	1.5
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson				1					1					2	4.6	0.8
	Jefferson															0.0	0.0
	Leon				1									1	2	1.1	0.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor							1							1	5.4	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua	1						1							2	1.1	0.0
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	2.5
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	7.2
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake			1											1	0.7	0.0
	Levy															0.0	1.5
	Marion						1								1	0.6	0.6
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	12.4
IV	Baker															0.0	0.0
	Clay										1				1	1.0	1.5
	Duval															0.0	0.5
	Flagler															0.0	0.0
	Nassau		1												1	2.3	3.3
	St. Johns															0.0	1.9
	Volusia															0.0	0.0
V	Pasco				1										1	0.4	0.4
	Pinellas	1		1				1				1			4	0.5	0.1
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough									2					2	0.2	0.0
	Manatee										1	1			2	1.1	0.0
	Polk											2			2	0.5	2.1
VII	Brevard															0.0	0.1
	Orange	1			1	1		1							4	0.7	0.7
	Osceola															0.0	0.8
	Seminole				1	1									2	0.8	0.3
VIII	Charlotte															0.0	1.2
	Collier															0.0	0.0
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee						1								1	0.3	0.4
	Sarasota										1	1			2	0.8	1.1
IX	Indian River															0.0	2.1
	Martin															0.0	0.4
	Okeechobee															0.0	0.0
	Palm Beach			1	1		1		1						4	0.5	0.6
	St. Lucie												1		1	0.8	0.0
X	Broward					1		1							2	0.2	0.8
XI	Dade															0.0	0.0
	Monroe															0.0	0.0
STATE TOTAL		3	2	4	8	4	4	7	1	4	3	5	1	1	47	0.4	0.5

*1984-1986 Average rate

ENCEPHALITIS, POST-INFECTIOUS AND OTHER REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



ENCEPHALITIS, POST-INFECTIOUS AND OTHER REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



ENCEPHALITIS, ARTHROPOD-BORNE

Eastern Equine Encephalitis (EEE)

In 1987, there was one human cases of EEE in Florida. The victim was a 79-year-old white female from Greenville, Florida (Madison County). She was healthy until around July 21 when she became lethargic and confused. She was admitted to Tallahassee Memorial Regional Medical Center on July 22 with disconjugate gaze, progressing to left and right hemiparesis and aphasia. Diagnosis upon admission was herpes encephalitis. Paired serum specimens obtained on July 23 and August 10 revealed an S_1 of 1:10 and an S_2 of 1:160 for Eastern Equine encephalitis. The woman recovered with severe residual sequalae. The woman reportedly lived near a "green swamp."

St. Louis Encephalitis (SLE)

There were no human cases of SLE in Florida in 1987.

Arbovirus Surveillance

During 1987 a total of 7,183 sentinel chicken sera from 30 counties were tested for hemagluttination (HI) antibodies to EEE and SLE virus by the HRS Epidemiology Research Center in Tampa. Most of these sera were collected during the summer and fall when the EEE and SLE virus are most active. EEE virus activity during the season was identified in 7 counties (Bay, Leon, Duval, Nassau, Volusia, Seminole, and Sarasota). EEE activity in 1987 continued through December, well beyond the usual May - August period.

SLE virus activity was identified via seroconversions in most all of the counties in District 8: Charlotte, Collier, Lee, and Sarasota. Additionally, Indian River county on the east coast of Florida showed activity. The reported SLE activity in monitor chicken flocks around the state was minimal in 1987. No county this year experienced an 80% seroconversion rate in a monitor chicken flock, consequently no epidemic alerts were issued.

MENINGITIS, ASEPTIC

In 1987, there were 665 cases of aseptic meningitis reported in Florida, a decrease from 1986 when 713 cases were reported. The overall state incidence per 100,000 population decreased from 6.1 per 100,000 in 1986 to 5.5 per 100,000 in 1987.

Aseptic meningitis cases were reported from all but 23 of Florida's 67 counties. The major population centers in the state accounted for most of the cases. Enteroviruses, which accounted for the majority of culture confirmed cases, are identified in most areas of the state. Enterovirus transmission occurs most frequently during late spring, summer, and fall which coincides with the peak incidence of 1987 aseptic meningitis cases during the months June through September.

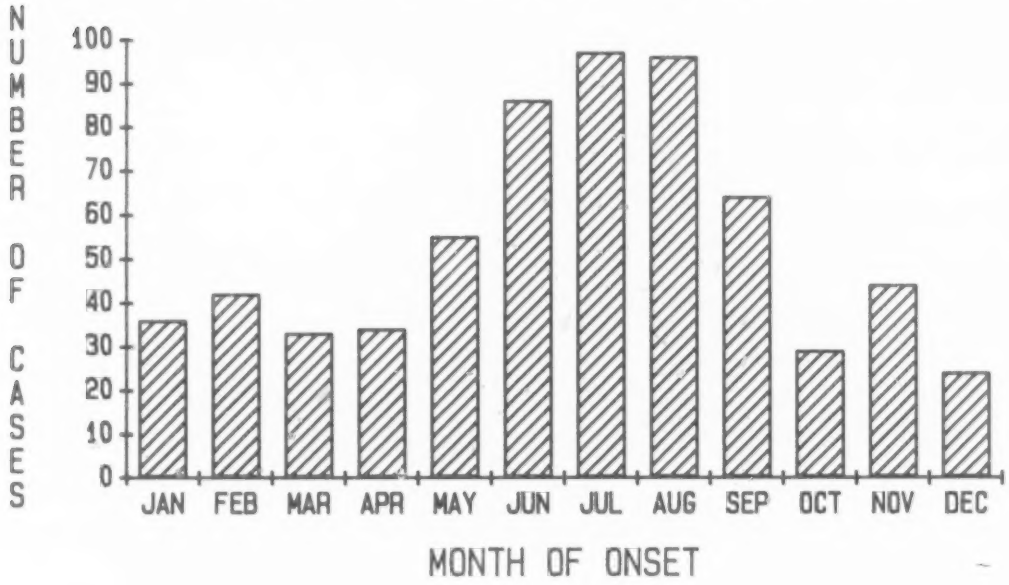
The highest age-specific incidence rate per 100,000 population was in the less than 1-year-old age group (145 cases, 85.7 per 100,000). The case rate then decreased rapidly with increasing age. The slightly elevated case rate in the age groups 1-4, 5-9, 20-24 and 25-29 may represent familial and parental associations with infants and young children.

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

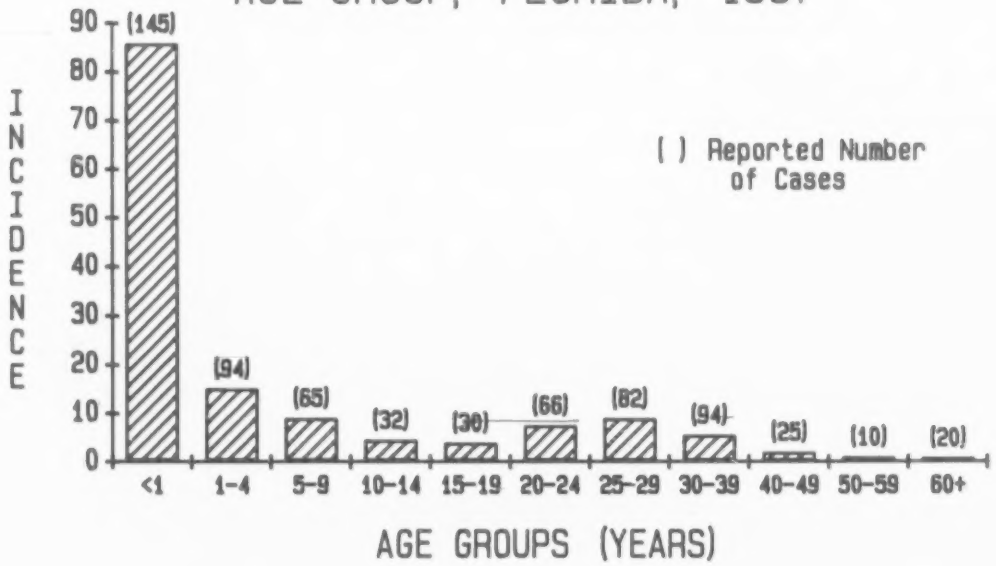
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia						1	2		3	1	1			8	2.8	1.0
	Okaloosa								1						1	0.7	1.2
	Santa Rosa								1						1	1.5	6.7
	Walton		1						1						2	7.2	1.3
II	Bay															0.0	1.9
	Calhoun															0.0	0.0
	Franklin															0.0	7.8
	Gadsden	1						1							2	4.3	1.5
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson				2						1			1	4	9.2	10.5
	Jefferson															0.0	0.0
	Leon	1	1			1	1	1	1					6	12	6.7	9.0
	Liberty							1							1	21.6	0.0
	Madison															0.0	0.0
	Taylor									2					2	10.7	7.4
	Wakulla								1	1					2	13.9	4.9
	Washington															0.0	0.0
III	Alachua	1	1	1		1	5	2	6		2	1			20	11.0	7.4
	Bradford															0.0	0.0
	Citrus															0.0	1.3
	Columbia								2						2	4.8	0.0
	Dixie										1				1	10.2	0.0
	Gilchrist															0.0	9.3
	Hamilton															0.0	0.0
	Hernando						1			1			1		3	3.7	3.8
	Lafayette															0.0	0.0
	Lake															0.0	1.6
	Levy															0.0	2.9
	Marion					1	3	4	6	3		3		1	21	11.9	4.7
	Putnam		1						1						2	3.3	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union							1				1			2	18.2	0.0
IV	Baker															0.0	0.0
	Clay	1					2	1					1		5	5.2	11.8
	Duval	1						1							2	0.3	0.4
	Flagler															0.0	4.0
	Nassau															0.0	4.9
	St. Johns						1	2							3	3.8	8.4
	Volusia			1		2			5	4	1	1			14	4.2	5.7
V	Pasco			1	2		3	3	3	1			1		14	5.5	4.5
	Pinellas	2			2	4	1	1	5	5	1	2	2	2	27	3.2	4.4
VI	Hardee															0.0	9.4
	Highlands		2		1	1									4	6.3	3.4
	Hillsborough	3	4	4	3	4	7	5	8	5	1	4			48	5.9	10.5
	Manatee			4		2		1		3		1		1	12	6.6	7.7
	Polk			2	1	4	4	6	5	4	2	1	2	1	32	8.2	12.7
VII	Brevard	2	3	1	4	1	7	7	5	1	1	2			34	9.0	6.2
	Orange	4	4	6	3	5	11	7	9	5	4	3	3		64	10.6	11.8
	Osceola				1			1			1				3	3.3	3.7
	Seminole	2	4		1	5	2	1	1	1					17	6.6	5.3
VIII	Charlotte											1		1	2	2.3	0.8
	Collier		4		1	1	1	1		2	1	3	2	1	17	13.3	5.9
	DeSoto															0.0	4.6
	Glades															0.0	0.0
	Hendry										1				1	4.1	2.9
	Lee	3	2	1	3	6	3	3	4	5	3	5	4	2	44	15.0	7.5
	Sarasota					1	2	2	3			2			10	3.9	1.5
IX	Indian River			1			1		1	1					4	4.7	4.2
	Martin	1	1			2		5	2					1	12	13.6	10.0
	Okeechobee								1						1	3.6	0.0
	Palm Beach	3	3	4	3	5	5	11	11	6	2	6	3		62	7.8	5.2
	St. Lucie		1	3			7					4			15	11.7	6.4
X	Broward	3	5		2	5	3	10	3	6	5	3		1	46	3.9	4.3
XI	Dade	8	5	4	4	4	15	17	10	5	1		5	7	85	4.7	5.2
	Monroe				1										1	1.3	0.9
STATE TOTAL		36	42	33	34	55	86	97	96	64	29	44	24	25	665	5.5	5.5

*1984-1986 Average rate

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



MENINGITIS, ASEPTIC - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



MENINGITIS, HAEMOPHILUS INFLUENZAE type b

In 1987, there were 420 cases of Haemophilus influenzae type b (Hib) meningitis reported in Florida, a slight increase from 1986, when 396 cases were reported. The overall incidence for the state increased slightly from 1986 (3.4 per 100,000) to 1987 (3.5 per 100,000).

Hib meningitis cases were reported from 45 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. The number of cases by month of onset showed lower incidence during the warmer months.

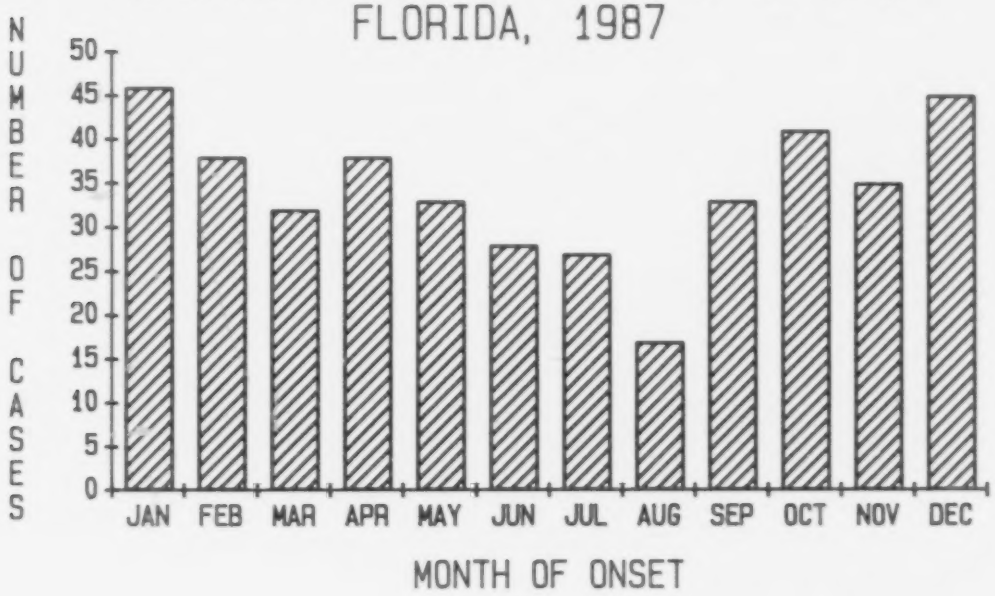
The peak age-specific incidence of reported cases occurred in the less than 1 year olds (103 cases, 60.9 per 100,000), followed by the 1-4 year olds (287 cases, 45.9 per 100,000). These two age groups accounted for 92.9% of the total cases. The low incidence in age groups 5-9 and above remained fairly constant. No cases were reported among those aged 20-24 and 25-29 years.

MENINGITIS, HAEMOPHILUS INFLUENZAE type b - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

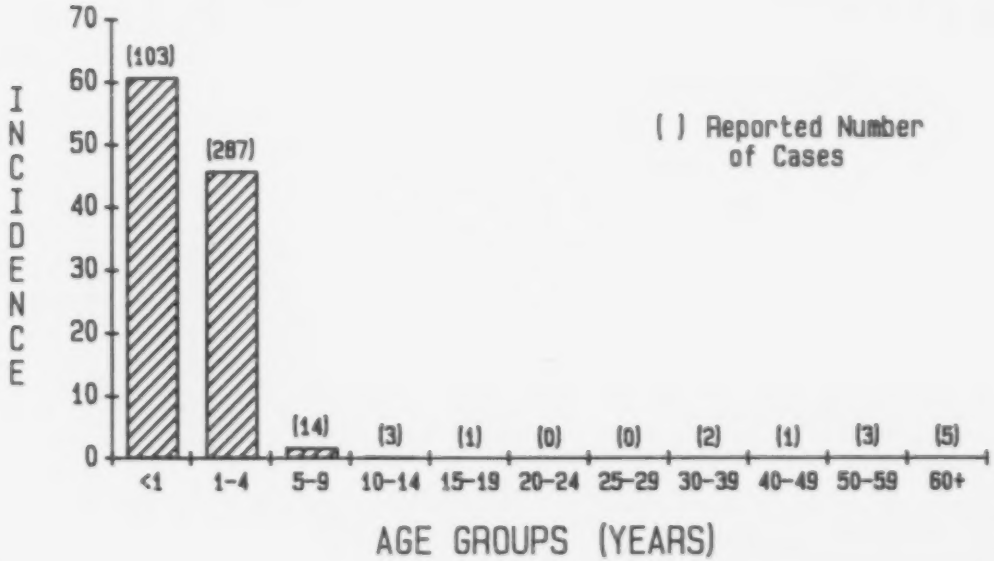
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia	1			1	1				2					5	1.8	3.7
	Okaloosa			1			1						2		4	2.7	5.5
	Santa Rosa															0.0	5.2
	Walton															0.0	5.1
II	Bay										1				1	0.8	8.4
	Calhoun											1			1	10.1	0.0
	Franklin															0.0	0.0
	Gadsden		1	1							3	1	2		8	17.0	10.3
	Gulf						1								1	8.4	0.0
	Holmes															0.0	0.0
	Jackson												1		1	2.3	1.6
	Jefferson															0.0	0.0
	Leon	1				1		1						4	7	3.9	5.5
	Liberty															0.0	0.0
	Madison															0.0	2.1
	Taylor															0.0	3.7
	Wakulla							1							1	6.9	9.9
	Washington															0.0	0.0
III	Alachua	1			1	1	2				1		4		10	5.5	3.0
	Bradford				1										1	4.1	0.0
	Citrus															0.0	3.1
	Columbia	1	1	1		1									4	9.6	3.3
	Dixie															0.0	0.0
	Gilchrist											1			1	13.8	0.0
	Hamilton															0.0	0.0
	Hernando								1						1	1.2	0.9
	Lafayette										1				1	21.1	0.0
	Lake	1			1		1			1		1			5	3.7	3.7
	Levy															0.0	2.9
	Marion	2	1	1	2	1				1			3		11	6.2	6.4
	Putnam	1		1											2	3.3	3.5
	Sumter															0.0	7.2
	Suwannee															0.0	0.0
	Union				1										1	9.1	3.1
IV	Baker															0.0	3.8
	Clay		1												1	1.0	3.4
	Duval	7	3	4	3	1	1	4	3	4		3	1		34	5.1	5.9
	Flagler															0.0	6.0
	Nassau	1						1							2	4.5	9.0
	St. Johns		1					1				1	1		4	5.1	3.3
	Volusia	1	1	1		1	1			1	2	1	1		10	3.0	2.3
V	Pasco				1					1	1	2			5	1.9	2.4
	Pinellas	2	1	2	1	2		1		2	2	1	1	1	16	1.9	2.0
VI	Hardee															0.0	4.7
	Highlands										1				1	1.6	1.1
	Hillsborough	2	1	2		3	2		1	1	1		3		16	2.0	3.0
	Manatee	1			1			1	1						4	2.2	2.3
	Polk		1		1	2	1	1		1	1	2	3		13	3.3	3.6
VII	Brevard			1		1	1		1				4		8	2.1	2.1
	Orange	4	5	2	4	3	4	1		4	5	3	1		36	5.9	4.5
	Osceola				1						2				3	3.3	4.9
	Seminole	1	1		1			1					1		5	1.9	3.0
VIII	Charlotte															0.0	2.1
	Collier					1	1		1				1		4	3.1	8.4
	DeSoto										1				1	4.3	7.6
	Glades															0.0	0.0
	Hendry															0.0	7.2
	Lee	2	2	1		1			1			2	3		12	4.1	4.8
	Sarasota		2				1		3		3		1		10	3.9	1.9
IX	Indian River		1												1	1.2	3.4
	Martin							1		2					3	3.4	5.2
	Okeechobee															0.0	9.3
	Palm Beach	1	3	4	5	5	3	3	2	5	2	4	5		42	5.3	3.2
	St. Lucie				1		1	1		2					5	3.9	0.8
X	Broward	4	3	4	3	3	3	5	2	2	5	3	1	1	39	3.3	2.0
XI	Dade	12	8	6	8	5	4	4	1	4	9	9	6	1	77	4.3	4.4
	Monroe		1		1										2	2.7	2.8
STATE TOTAL		46	38	32	38	33	28	27	17	33	41	35	45	7	420	3.5	3.6

*1984-1986 Average rate

MENINGITIS, HAEMOPHILUS INFLUENZAE type b REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



MENINGITIS, HAEMOPHILUS INFLUENZAE type b REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



MENINGITIS, MENINGOCOCCAL

In 1987, 117 cases of meningitis due to Neisseria meningitidis were reported. This was an incidence rate of 1.0 cases per 100,000 population, an increase of 11.1% from that reported in 1986 (0.9). The peak age-specific incidence of reported cases occurred in the less than 1 year olds (20 cases, 11.8 per 100,000) followed by the 1-4 year olds (40 cases, 6.4 per 100,000). These two age groups represented 51.3% of the total cases. The incidence in the older age groups remained low and fairly constant.

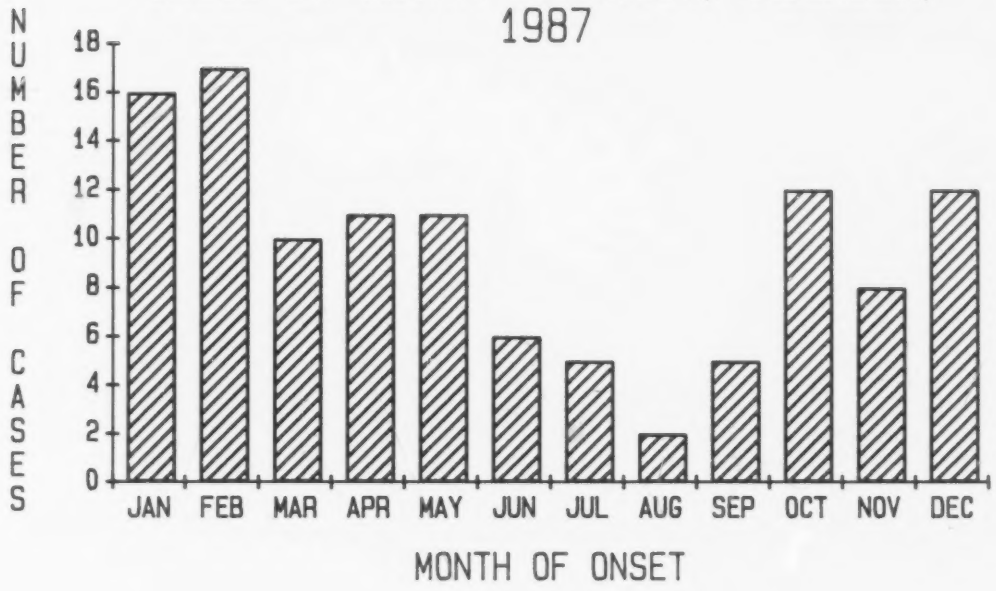
Meningococcal meningitis cases were reported from 34 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. The majority of cases occurred in January (16) and February (17).

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

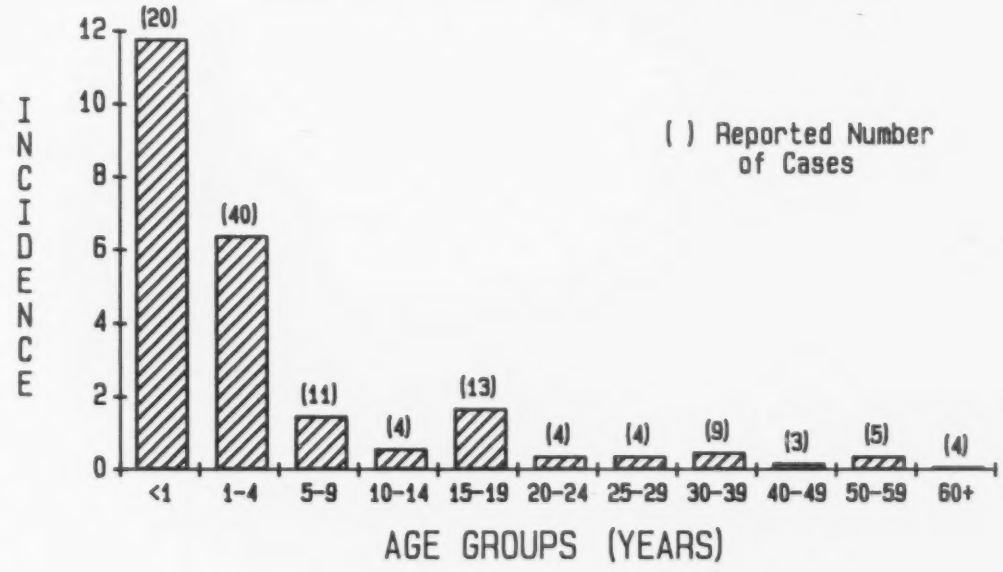
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia	1													1	0.4	0.5
	Okaloosa					1				1					2	1.3	0.0
	Santa Rosa															0.0	1.0
	Walton															0.0	0.0
II	Bay		2										1		3	2.3	1.1
	Calhoun													1	1	10.1	0.0
	Franklin															0.0	0.0
	Gadsden										1				1	2.1	0.7
	Gulf															0.0	0.0
	Holmes			1											1	6.1	2.1
	Jackson	1	1	1											3	6.9	0.8
	Jefferson															0.0	0.0
	Leon	1		1		1					1				4	2.2	0.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua											1	1		2	1.1	0.8
	Bradford															0.0	2.8
	Citrus											1			1	1.2	0.0
	Columbia															0.0	0.0
	Dixie															0.0	3.5
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	1.4
	Lafayette															0.0	0.0
	Lake					1					1				2	1.5	0.8
	Levy															0.0	0.0
	Marion		1			2	1			2					6	3.4	0.2
	Putnam															0.0	2.3
	Sumter															0.0	2.4
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker							1							1	5.4	5.7
	Clay		1												1	1.0	1.1
	Duval	2	3		3				1	1			2		12	1.8	1.1
	Flagler															0.0	0.0
	Nassau															0.0	4.9
	St. Johns															0.0	0.5
	Volusia		2												2	0.6	0.9
V	Pasco	1													1	0.4	2.2
	Pinellas	2	2	1	2	2					1	1	1		12	1.4	0.8
VI	Hardee		1											1	2	8.9	0.0
	Highlands															0.0	0.0
	Hillsborough	3		1	2			2				1	2		11	1.4	1.0
	Manatee	1													1	0.5	3.6
	Polk				1	1				1	1				4	1.0	0.0
VII	Brevard			1					1						2	0.5	0.8
	Orange	1	2	1	2		1						1		8	1.3	1.6
	Osceola										1				1	1.1	0.8
	Seminole												1		1	0.4	0.1
VIII	Charlotte															0.0	0.8
	Collier										2				2	1.6	0.0
	DeSoto															0.0	1.5
	Glades															0.0	0.0
	Hendry															0.0	1.4
	Lee	1													1	0.3	0.6
	Sarasota						1				1				2	0.8	1.6
IX	Indian River						1				1				2	2.4	0.0
	Martin															0.0	0.8
	Okeechobee															0.0	0.0
	Palm Beach		1	2	1	1		1			1		1		8	1.0	1.0
	St. Lucie					1									1	0.8	0.0
X	Broward	1		1											2	0.2	1.0
XI	Dade	1	1			1	2	1			1	4	2		13	0.7	0.9
	Monroe															0.0	0.0
STATE TOTAL		16	17	10	11	11	6	5	2	5	12	8	12	2	117	1.0	0.9

*1984-1986 Average rate

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



MENINGITIS, MENINGOCOCCAL - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



MENINGITIS, OTHER BACTERIAL

In 1987, 334 cases of meningitis, other bacterial [i.e., Group B Streptococcus (54 cases), Listeria monocytogenes (16 cases), Streptococcus pneumonia (46 cases), and Other bacterial including Unspecified (218 cases)] were reported. This was an incidence of 2.8 cases per 100,000 population, a slight decrease from the incidence reported in 1986 (2.9). The peak age-specific incidence of reported cases occurred in the less than 1 year olds (96 cases, 56.8 per 100,000) followed by the 1-4 year olds (77 cases, 12.3 per 100,000). These two age groups represented 51.8% of the total cases reported. Nearly 70% of all reported cases of bacterial meningitis in the U.S. occur in children less than 5 years of age. The incidence in age groups 5 years of age and above remained low and fairly constant.

Bacterial meningitis (excluding Haemophilus influenzae type b and Neisseria meningitidis) cases were reported from 47 of Florida's 67 counties. There was no definable geographic clustering of cases within Florida. Most of the cases (although not necessarily the highest incidence) were accounted for by the major population centers in the state. Liberty County had the highest incidence with 21.6 cases per 100,000 population.

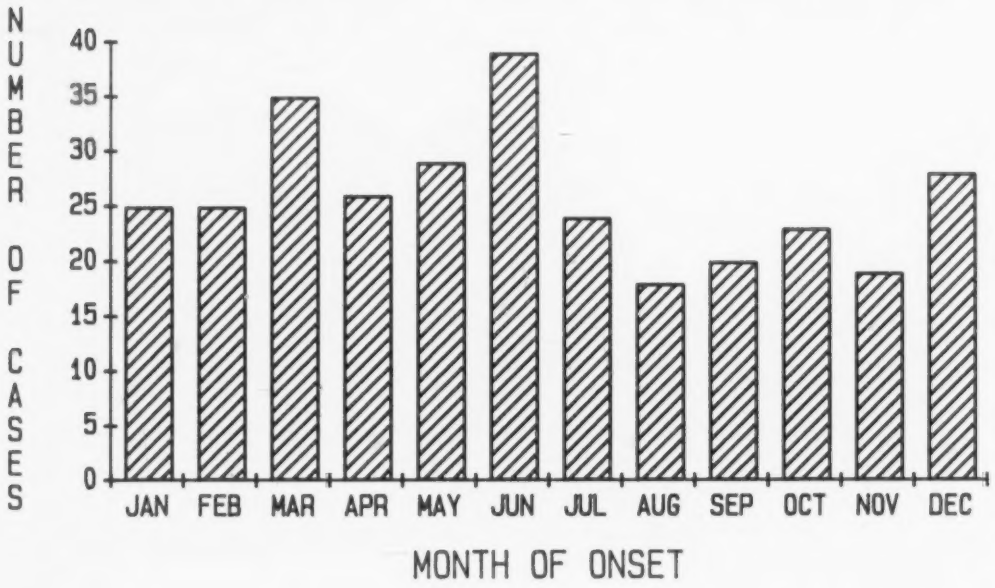
The number of reported cases by month of onset was constant throughout the year, averaging 26 cases per month, with slight drops in late Summer and early Fall.

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

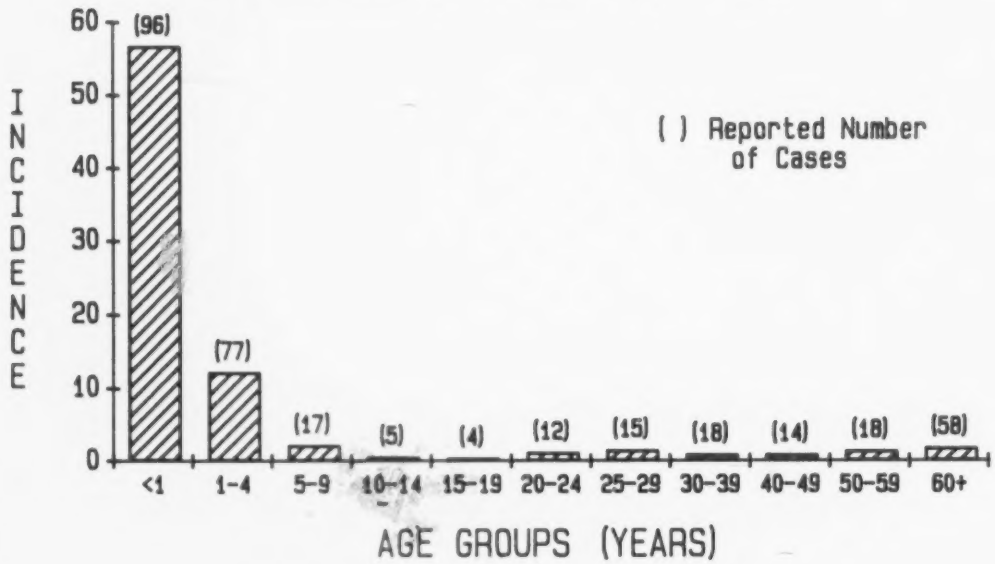
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia		2		1		3			1	1	1			9	3.2	1.4
	Okaloosa						1					1			2	1.3	0.0
	Santa Rosa	2					1	1	1						5	7.5	2.1
	Walton								1				1		2	7.2	1.3
II	Bay															0.0	3.3
	Calhoun															0.0	0.0
	Franklin	1													1	11.5	0.0
	Gadsden		1	1											2	4.3	10.3
	Gulf			1											1	8.4	0.0
	Holmes															0.0	2.1
	Jackson															0.0	0.8
	Jefferson															0.0	8.6
	Leon		3	6	2	1	6	6	1		2			4	31	17.4	9.3
	Liberty							1							1	21.6	0.0
	Madison															0.0	0.0
	Taylor														-	0.0	22.2
	Wakulla						1								1	6.9	0.0
	Washington								1						1	6.5	2.2
III	Alachua	1			2			1			2		1		7	3.8	2.7
	Bradford				1		2				1				4	16.4	7.0
	Citrus					1		1						1	3	3.6	4.9
	Columbia		1							1				1	3	7.2	7.5
	Dixie															0.0	0.0
	Gilchrist															0.0	4.6
	Hamilton				1										1	10.6	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake			1	1	1	1								4	2.9	4.5
	Levy						1				1		1		3	12.6	0.0
	Marion	1			1	4	1	1		1	1	1	1		12	6.8	5.5
	Putnam		1			1			1		2				5	8.3	5.2
	Sumter			1						1		1			3	10.1	7.2
	Suwannee													1	1	3.8	0.0
	Union															0.0	3.1
IV	Baker															0.0	9.5
	Clay						1								1	1.0	1.1
	Duval	2	2	1	2	1				2			1	1	12	1.8	4.0
	Flagler															0.0	4.0
	Nassau															0.0	8.2
	St. Johns				1								1		2	2.6	1.9
	Volusia	2	2	1	2			1					1	1	10	3.0	2.9
V	Pasco	1	1	1					1				1		5	1.9	2.1
	Pinellas	2		1			2	1			1		4		11	1.3	1.2
VI	Hardee															0.0	1.6
	Highlands								2						2	3.2	0.0
	Hillsborough		1	1		2	2	3	3		1	1	1	1	16	2.0	2.7
	Manatee					1									1	0.5	0.4
	Polk	1		4			1		1	1		1	2		11	2.8	4.9
VII	Brevard			1		2				2	1	2			8	2.1	1.1
	Orange	3	3	3	2	3	1		1	2	3	1	1		23	3.8	5.2
	Osceola			1	1										2	2.2	4.5
	Seminole	1	1	2	1						1	1			7	2.7	2.1
VIII	Charlotte															0.0	0.4
	Collier			1					1		2	1	1		6	4.7	7.5
	DeSoto										1				1	4.3	0.0
	Glades															0.0	0.0
	Hendry		1			1									2	8.2	1.4
	Lee		1		1	1					1	1	1	1	7	2.4	4.5
	Sarasota	1		1	2		2					1			7	2.7	7.0
IX	Indian River		2			1		1						1	5	5.9	7.6
	Martin					1				1				1	3	3.4	2.4
	Okeechobee															0.0	5.3
	Palm Beach	4		2	1	4	2	3	1	4		6	6		33	4.2	1.5
	St. Lucie		1		1	3	2			1					8	6.2	2.8
X	Broward	2	1	2		1	2	2	1		1		4	8	24	2.0	2.0
XI	Dade	1	1	3	3		7	2	2	3	1			2	25	1.4	1.2
	Monroe															0.0	0.9
STATE TOTAL		25	25	35	26	29	39	24	18	20	23	19	28	23	334	2.8	2.7

*1984 - 1986 Average rate

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



MENINGITIS, OTHER BACTERIAL - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



HEPATITIS A

In 1987, 729 cases of hepatitis A were reported, as compared with 1,268 cases reported in 1986. The incidence in 1987 (6.0 per 100,000) decreased 44.4% from the incidence in 1986 (10.8).

The number of cases rose slightly from January to June (53 to 70), then gradually decreased from July to September (65 to 43). The fewest cases were seen in September (43). The general trend was a Winter/Spring increase in cases from January through June, with subsequent Summer/Fall decrease from July through December.

The bimodal distribution of cases among age groups was similar to previous years. Children aged 5-9 years and 10-14 years had the highest incidence of illness per 100,000 population (13.2 for both). Young adults aged 20-24 years and 25-29 years had the next highest incidence of illness per 100,000 population (12.7 and 10.5, respectively. The lowest incidence was reported for children less than 1 year of age (1.2) who, when infected, frequently have subclinical infection or non-specific mild illness and are probably underdiagnosed.

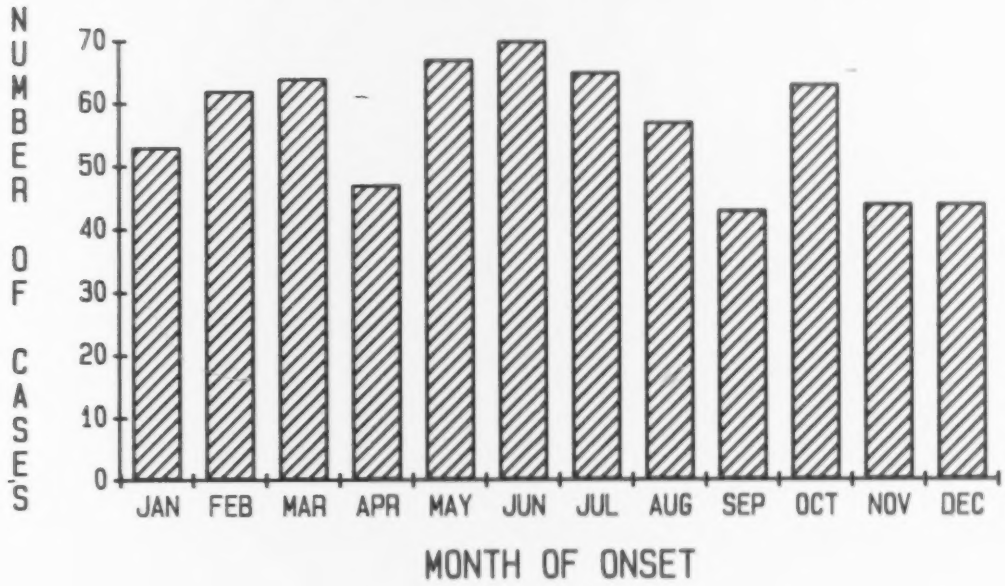
Hepatitis A infection was reported from all but 24 of Florida's 67 counties. The highest incidence of infection per 100,000 population were observed in Martin (53.3) and Gilchrist (41.5) counties.

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

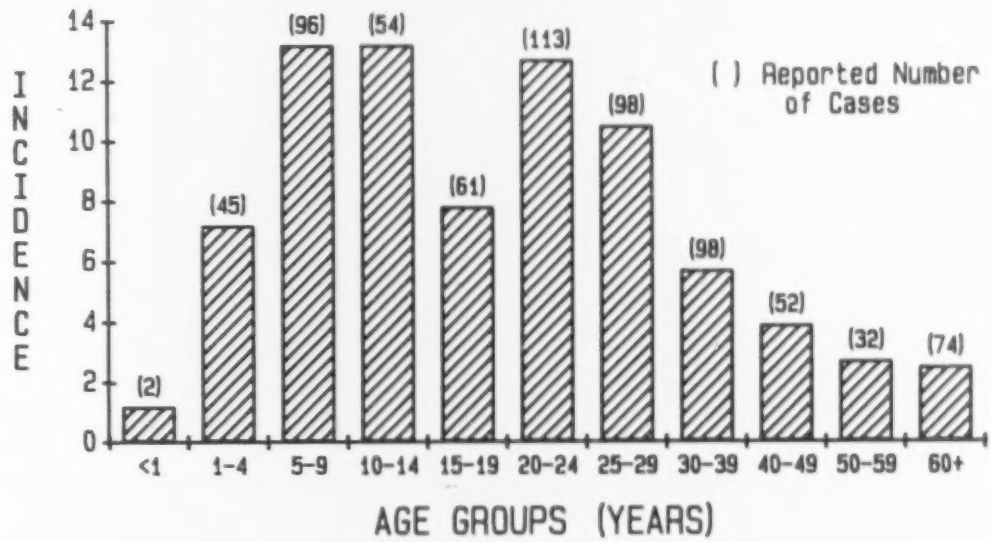
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR. * MEAN
I	Escambia			1	2	1	4	4	1	1	1	5	2	2	24	8.5	3.7
	Okaloosa	1		1				1							3	2.0	4.8
	Santa Rosa															0.0	2.1
	Walton															0.0	1.3
II	Bay			1				2							3	2.3	0.3
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden										3				3	6.4	17.6
	Gulf															0.0	0.0
	Holmes															0.0	4.3
	Jackson															0.0	4.1
	Jefferson															0.0	0.0
	Leon		1	1			3							1	6	3.4	3.1
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor		1												1	5.4	1.8
	Wakulla									1					1	6.9	2.5
	Washington															0.0	13.3
III	Alachua							1							1	0.5	10.4
	Bradford						1					1			2	8.2	4.2
	Citrus											3	2		5	6.1	4.5
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist		1	1		1									3	41.5	37.2
	Hamilton															0.0	0.0
	Hernando			1	1	1							1		4	5.0	6.6
	Lafayette															0.0	0.0
	Lake	1	1	1	2	1	2		2		1				11	8.1	15.2
	Levy															0.0	2.9
	Marion			2						1	2	1		1	7	4.0	11.1
	Putnam			1	1			1							3	5.0	5.2
	Sumter															0.0	12.0
	Suwannee					1		1							2	7.5	1.3
	Union															0.0	6.2
IV	Baker															0.0	1.9
	Clay				1		1								2	2.1	8.0
	Duval	3	1	2	7	4	5	1	1	6	10	5	8	1	54	8.1	12.3
	Flagler															0.0	2.0
	Nassau		1	2	2					2			2		9	20.5	4.1
	St. Johns								1			1			2	2.6	39.8
	Volusia	11	4	11	1	3	1	1		2	1			1	36	10.8	35.8
V	Pasco	3	1	4	2	7	4	4	11	5	15	5	6		67	26.1	24.4
	Pinellas	2	2	3			2	2	1	1		2	2	5	22	2.6	3.9
VI	Hardee		1				1	5				1			8	35.7	6.2
	Highlands		1		2	3						1		1	8	12.7	17.9
	Hillsborough	9	9	7	9	11	7	6	9	9	4	5	2		87	10.7	16.7
	Manatee		4	2	2	1	7	8	1	1	2	2		4	34	18.7	32.3
	Polk	1				2		2		1			6		12	3.1	11.3
VII	Brevard			1			1		1			1		1	5	1.3	3.2
	Orange	8	8	4	1	2			2	2	4		4	4	39	6.4	19.1
	Osceola							2				1			3	3.3	7.4
	Seminole		3	1				1			1		2		8	3.1	7.3
VIII	Charlotte	2	1		1									10	14	15.8	5.7
	Collier		2		2	2	7	8	4	1	1		3	3	33	25.7	16.5
	DeSoto	2													2	8.7	21.3
	Glades															0.0	0.0
	Hendry															0.0	11.5
	Lee	3	1				4		1		1	1			11	3.7	5.1
	Sarasota		6	3	3	3	3	3	4	2	1	2		1	31	12.2	11.7
IX	Indian River			1											1	1.2	2.1
	Martin					19	14	4	1	2	7				47	53.3	2.0
	Okeechobee															0.0	25.2
	Palm Beach	1	3	2	2	1	1	3	5		1			1	20	2.5	6.7
	St. Lucie	2			1				1	1		1	1		7	5.4	4.2
X	Broward	2	5	3	2	1	1	3	3		1	2	1	11	35	3.0	7.6
XI	Dade	2	5	8	3	3	1	2	8	5	7	4	2	3	53	2.9	3.6
	Monroe															0.0	7.0
STATE TOTAL		53	62	64	47	67	70	65	57	43	63	44	44	50	729	6.0	9.6

*1984-1986 Average rate

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



HEPATITIS A - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



HEPATITIS B

In 1987, 1,563 cases of hepatitis B were reported to the state, as compared with 1,659 cases reported in 1986. The incidence in 1987 (12.9 per 100,000) decreased 8.5% from the incidence in 1986 (14.1). The monthly number of cases remained fairly uniform throughout the year, except for a sharp increase from 106 to 150 between January and March. For the remainder of the year, the number of cases per month ranged from 92 to 114.

The age groups with the highest incidences per 100,000 were the 25-29 and the 20-24 year olds (32.5 and 29.3, respectively), followed by those aged 30-39 (21.9) and 15-19 years (16.1).

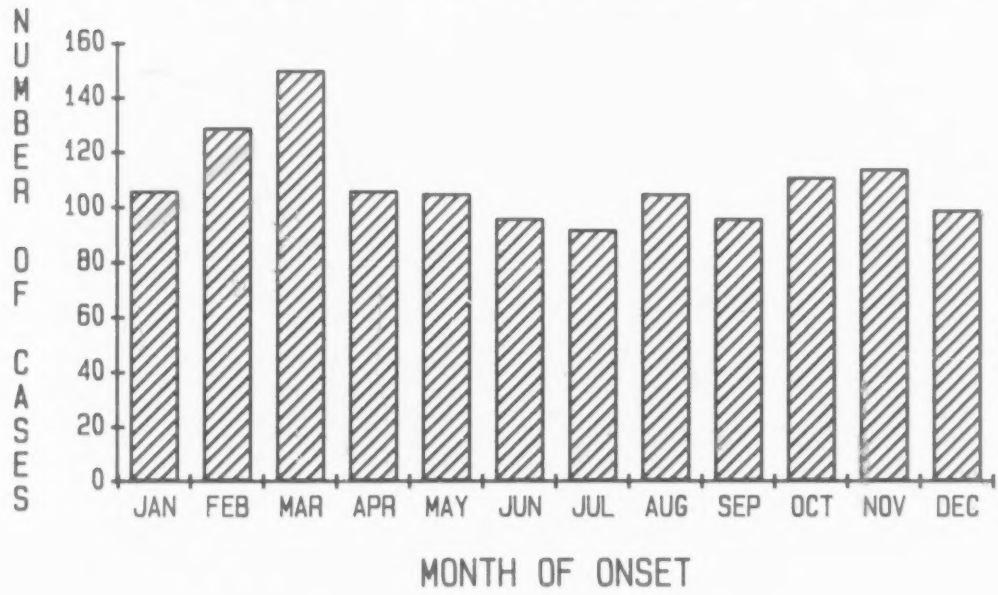
Hepatitis B infections were reported from all but 8 of Florida's 67 counties. The highest incidence per 100,000 population was observed in Sumter (43.8) and Monroe (34.7) counties.

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

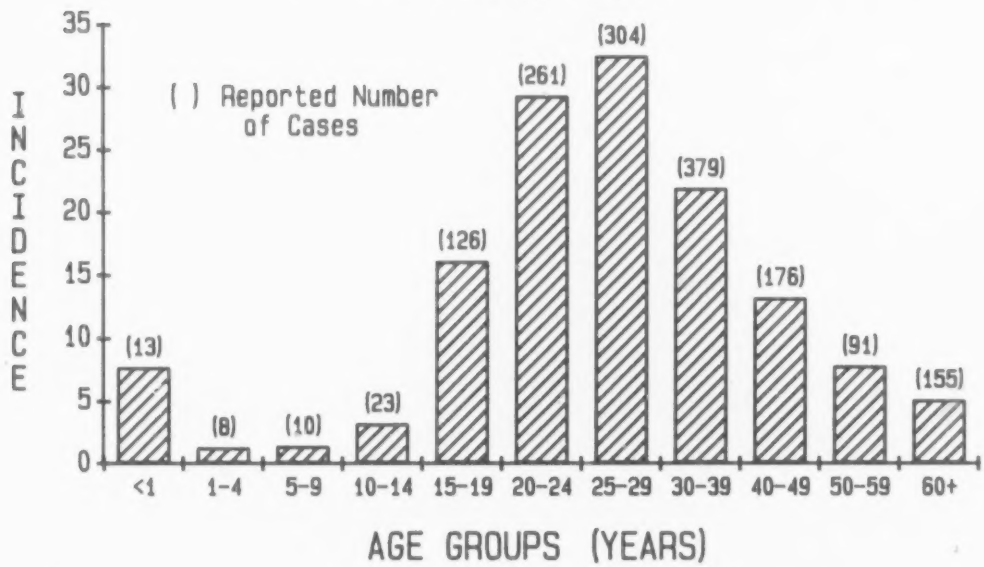
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia	2	4	3	3	9	5	1	4	4		4	12	11	62	21.9	8.9
	Okaloosa	1	4	5		2	2	2	1		1	2	1		21	13.9	13.6
	Santa Rosa		2	1	1	1			1		1	2	1	2	12	17.9	4.1
	Walton			1		1			1				1	1	5	18.0	7.6
II	Bay	2	1			1				1			1		6	4.5	4.4
	Calhoun	1													1	10.1	7.0
	Franklin							1							1	11.5	0.0
	Gadsden		1	1								1		1	4	8.5	39.7
	Gulf				1										1	8.4	11.7
	Holmes															0.0	4.3
	Jackson	3	1											2	6	13.9	9.7
	Jefferson															0.0	0.0
	Leon	1		1	2	1	1			2	1	1		5	15	8.4	13.8
	Liberty		1												1	21.6	21.9
	Madison						1								1	6.3	12.7
	Taylor	1							1						2	10.7	12.9
	Wakulla															0.0	14.8
	Washington															0.0	0.0
III	Alachua	1		3	2		1			2		1	1		11	6.0	4.9
	Bradford				1								1		2	8.2	14.0
	Citrus							1			2	1			4	4.9	7.1
	Columbia			1		1		2		1				1	6	14.4	6.7
	Dixie						1								1	10.2	14.2
	Gilchrist															0.0	4.6
	Hamilton															0.0	25.1
	Hernando			1			1		1	1			1	2	7	8.7	10.3
	Lafayette															0.0	7.3
	Lake	1	1	4	5	2	3		2	1		4	3	4	30	22.0	18.4
	Levy										1				1	4.2	4.4
	Marion	2	1	1	1	1	1		1	2	2	1		2	15	8.5	15.4
	Putnam			2		2	1				1			2	8	13.2	10.4
	Sumter	1	2	1			1	1		5	1	1			13	43.8	34.7
	Suwannee				1									2	3	11.3	5.2
	Union				1				1						2	18.2	58.9
IV	Baker			1											1	5.4	11.4
	Clay				1	1	1		3						6	6.3	6.1
	Duval	4	13	33	3	4	5	8	10	9	10	14	20	1	134	20.0	23.8
	Flagler						1							1	2	10.6	4.0
	Nassau	1	5		1										7	15.9	13.1
	St. Johns	1	3	1	1		1			1		2	1		11	14.0	51.5
	Volusia	6	6	2	2	2	2	3	6	3	2	4	2	28	68	20.4	28.4
V	Pasco	1	2		5	4	1	2	1	1		1	2		20	7.8	10.2
	Pinellas	7	2	2	5	8	5	5	5	6	6	8	1	8	68	8.1	11.3
VI	Hardee							1		2					3	13.4	6.2
	Highlands	1													1	1.6	0.6
	Hillsborough	13	9	8	10	7	9	11	4	9	14	7	9		110	13.6	15.1
	Manatee	3	1	1	1	1		2	1	1		3	2	14	30	16.5	19.8
	Polk	8	4	3	1	3	2	7	6	1	2	4	6	3	50	12.8	13.0
VII	Brevard	1	2	1	4	2	1	2	1	2	3	4		21	44	11.7	13.4
	Orange	5	9	14	4	5	5	6	11	8	4	9	5	16	101	16.7	27.1
	Osceola	2	1		2	1			1	2			3	3	15	16.7	14.8
	Seminole	1	3	5	1				2		2	3	3		20	7.8	14.9
VIII	Charlotte			3					1		1			4	9	10.2	15.2
	Collier		1	1	4	3	2	3		1	2		1	7	25	19.5	15.7
	DeSoto					2	1				1			1	5	21.7	35.0
	Glades															0.0	0.0
	Hendry	1	2		2			1							6	24.6	18.6
	Lee	3	4	3	3	4	5	2	3	1		2	1	8	39	13.3	25.0
	Sarasota	7	2	3	1		8	2	3	3	3	4		2	38	14.9	17.6
IX	Indian River	2		1			1	1	1					5	11	13.0	4.7
	Martin				2	1		2	1					1	7	7.9	17.6
	Okeechobee				1						1	1	1		4	14.3	8.0
	Palm Beach	9	12	12	8	10	7	8	7	8	15	9	8		113	14.3	15.1
	St. Lucie	1	1		1			1	3	1	3	2			14	10.9	15.5
X	Broward	13	18	14	14	16	9	10	8	10	18	4	7	62	203	17.2	16.7
XI	Dade		11	14	10	9	12	7	14	7	5	7	3	32	131	7.3	6.8
	Monroe			3	1	1				1	9	7	2	2	26	34.7	27.4
STATE TOTAL		106	129	150	106	105	96	92	105	96	111	114	99	254	1563	12.9	14.8

*1984-1986 Average rate

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



HEPATITIS B - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



HEPATITIS NON-A, NON-B ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS

In 1987, 57 cases of non-A non-B (NANB) hepatitis associated with blood or blood products were reported to the state, as compared with 72 cases reported in 1986. The incidence per 100,000 population in 1987 (0.5) decreased by 16.7% from 1986 (0.6). The number of cases per month remained fairly constant throughout the year, with the most cases seen in January and May (7). The age groups with the highest incidence were the 60+ year olds (0.8 per 100,000) and those aged 50-59 (0.8).

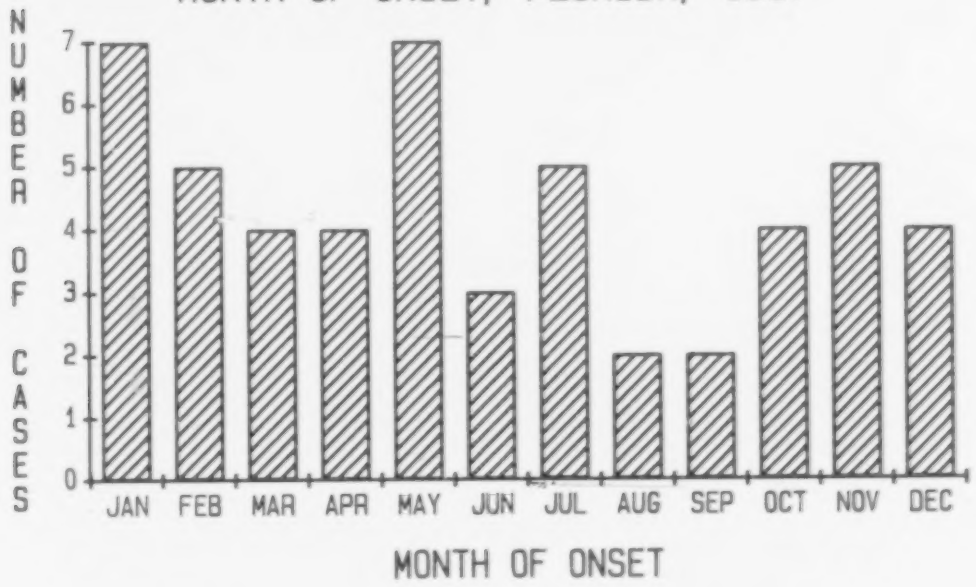
Cases of hepatitis NANB associated with blood or blood products were reported from 24 of Florida's 67 counties. The highest incidence was observed in Hendry County (12.3 per 100,000).

HEPATITIS NON-A, NON-B (ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

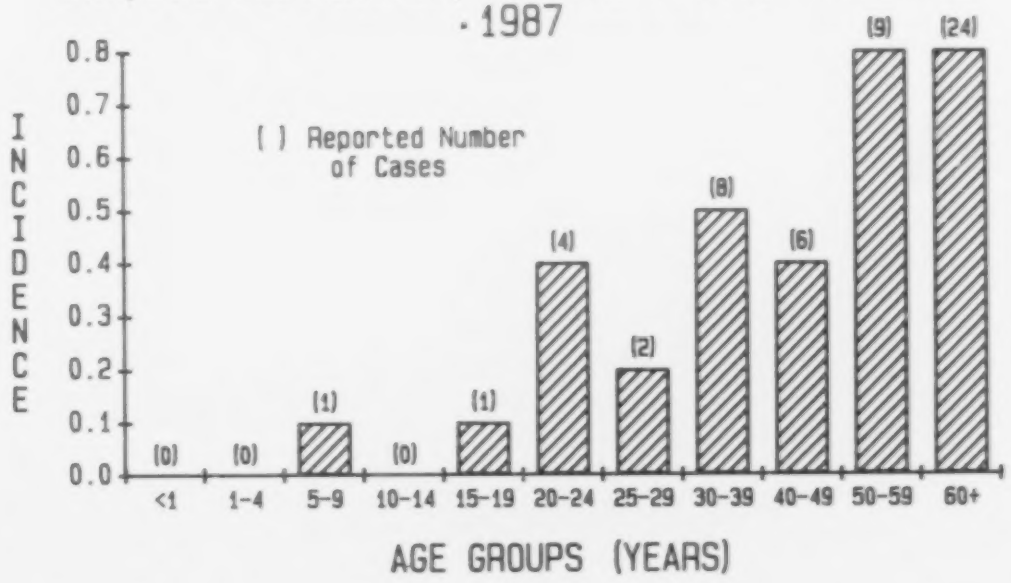
HRS DIST	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR. * MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.2
	Santa Rosa												2		2	3.0	0.0
	Walton															0.0	2.5
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	3.9
	Gadsden					1							1		2	4.3	1.5
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon					1									1	0.6	0.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	1.1
	Bradford															0.0	1.4
	Citrus											1			1	1.2	0.0
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando		1											1	2	2.5	0.0
	Lafayette															0.0	0.0
	Lake															0.0	0.8
	Levy											1			1	4.2	0.0
	Marion															0.0	0.4
	Putnam															0.0	0.0
	Sumter															0.0	1.2
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	15.2
	Clay						1					1			2	2.1	3.4
	Duval															0.0	1.1
	Flagler	1													1	5.3	0.0
	Nassau															0.0	3.3
	St. Johns								1						1	1.3	1.9
	Volusia	1		1											2	0.6	1.5
V	Pasco	2			1										3	1.2	1.5
	Pinellas	1	1				1								3	0.4	1.4
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough					1				1					2	0.2	0.3
	Manatee															0.0	0.0
	Polk															0.0	0.8
VII	Brevard		1											1	2	0.5	0.7
	Orange		1								1				2	0.3	0.9
	Osceola															0.0	0.8
	Seminole			1		1		1						1	4	1.6	1.0
VIII	Charlotte															0.0	0.0
	Collier													1	1	0.8	2.8
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry			1							1	1			3	12.3	1.4
	Lee															0.0	1.2
	Sarasota	1						1			1		1		4	1.6	1.1
IX	Indian River			1					1						2	2.4	2.5
	Martin													1	1	1.1	2.0
	Okeechobee															0.0	0.0
	Palm Beach	1			1	1		3							6	0.8	0.5
	St. Lucie															0.0	1.9
X	Broward					1									1	0.1	1.1
XI	Dade		1		2	1	1			1	1	1			8	0.4	0.2
	Monroe															0.0	0.0
STATE TOTAL		7	5	4	4	7	3	5	2	2	4	5	4	5	57	0.5	0.8

*1984-1986 Average rate

HEPATITIS NON-A, NON-B (ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



HEPATITIS NON-A, NON-B (ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



HEPATITIS NON-A, NON-B
NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS

In 1987, 98 cases of non-A non-B (NANB) hepatitis not associated with blood or blood products were reported to the state, as compared with 171 cases reported in 1986. The incidence in 1987 (0.8 per 100,000) decreased by 46.7% from the rate in 1986 (1.5 per 100,000)..

Age groups with the highest incidence were the 20-24 year olds, 25-29 year olds, and those aged 30-39 years (1.5 per 100,000, for all three age groups). The number of cases per month ranged from 4 in December to 12 in March and May.

Cases of hepatitis NANB not associated with blood or blood products were observed in 19 of Florida's 67 counties. The highest incidence was reported from Orange County (4.5 per 100,000).

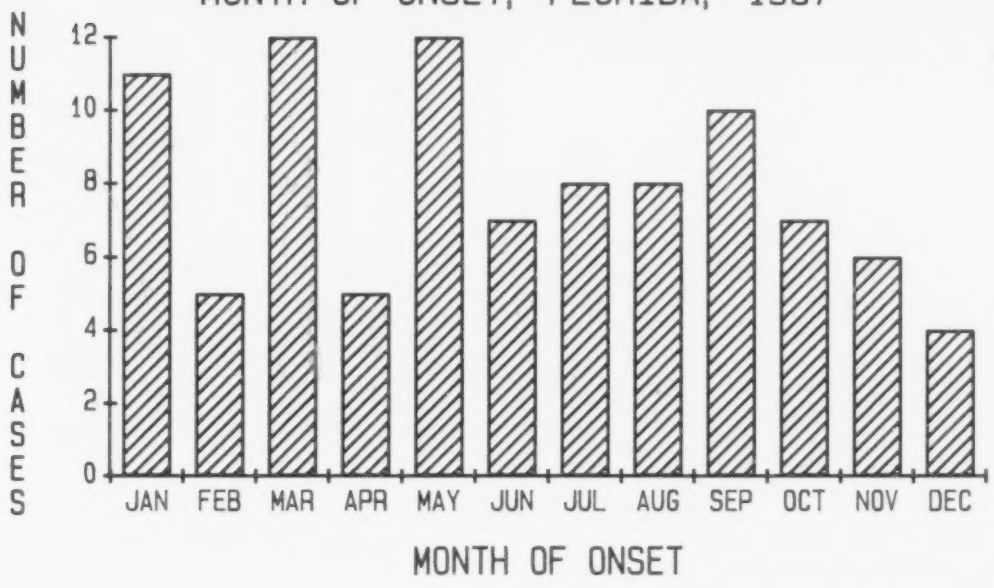
Documented non-blood transmission (i.e.,fecal/oral and water borne) of NANB hepatitis virus has not been noted in the United States. The age group peak incidence and Winter/Spring bi-seasonal peaks of these cases suggests probable undocumented blood-borne transmission. A prospective study of this question is planned.

HEPATITIS NON-A, NON-B (NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

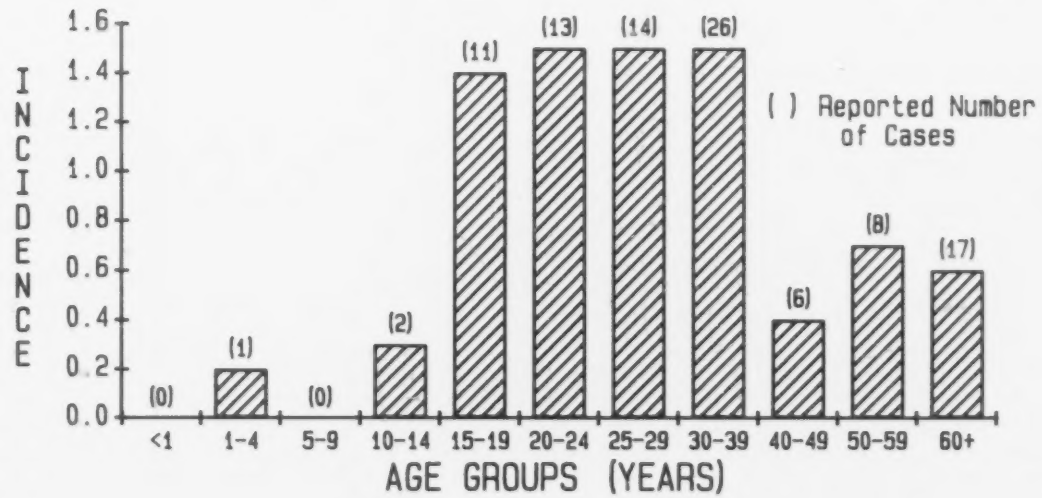
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia			2		1				2					5	1.8	1.2
	Okaloosa															0.0	0.5
	Santa Rosa															0.0	1.0
	Walton															0.0	0.0
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon					1									1	0.6	0.8
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	17.3
	Washington															0.0	0.0
III	Alachua							1		1					2	1.1	1.7
	Bradford															0.0	0.0
	Citrus															0.0	2.2
	Columbia			1											1	2.4	1.7
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake												1		1	0.7	0.3
	Levy															0.0	0.0
	Marion															0.0	0.8
	Putnam															0.0	0.6
	Sumter															0.0	3.6
	Suwannee															0.0	0.0
	Union															0.0	9.3
IV	Baker															0.0	0.0
	Clay					1									1	1.0	0.0
	Duval															0.0	0.8
	Flagler															0.0	0.0
	Nassau	1													1	2.3	3.3
	St. Johns															0.0	1.9
	Volusia			2	1		1	1	1						6	1.8	2.9
V	Pasco															0.0	2.4
	Pinellas		1				1	2		1	1	1	1		8	1.0	2.2
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough	3		2		1			1			1	1		9	1.1	2.7
	Manatee	1							1			1			3	1.6	2.1
	Polk															0.0	1.3
VII	Brevard															0.0	0.6
	Orange	1	3	1	2	2	2	2	3	5	3	1	1	1	27	4.5	9.1
	Osceola				1										1	1.1	6.2
	Seminole	1		1			1					1			4	1.6	3.1
VIII	Charlotte															0.0	0.0
	Collier															0.0	0.8
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee	2				1		1			1	1			6	2.0	2.1
	Sarasota															0.0	3.4
IX	Indian River															0.0	0.4
	Martin				1		1								2	2.3	2.0
	Okeechobee															0.0	0.0
	Palm Beach	2	1	1		2		1	1	1					9	1.1	4.0
	St. Lucie															0.0	2.2
X	Broward										2			1	3	0.3	0.6
XI	Dade			2		3	1		1				—	1	8	0.4	0.8
	Monroe															0.0	0.5
STATE TOTAL		11	5	12	5	12	7	8	8	10	7	6	4	3	98	0.8	1.9

*1984-1986 Average rate

HEPATITIS NON-A, NON-B (NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



HEPATITIS NON-A, NON-B (NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS) - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



HEPATITIS UNSPECIFIED

In 1987, 100 cases of hepatitis unspecified were reported to the state, as compared with 172 cases reported in 1986. The incidence in 1987 (0.8 per 100,000) decreased 46.7% from 1986 (1.5 per 100,000).

The highest age-specific incidence per 100,000 population occurred among the 25-29 year olds (2.8), followed by those aged 30-39 (1.3) and 20-24 years (1.1). A Spring/Summer seasonal trend was noticed by month of onset, with most cases occurring in February and June (11).

Cases of unspecified hepatitis were reported from 24 of Florida's 67 counties. The highest incidence was observed in Lafayette County (21.1 per 100,000).

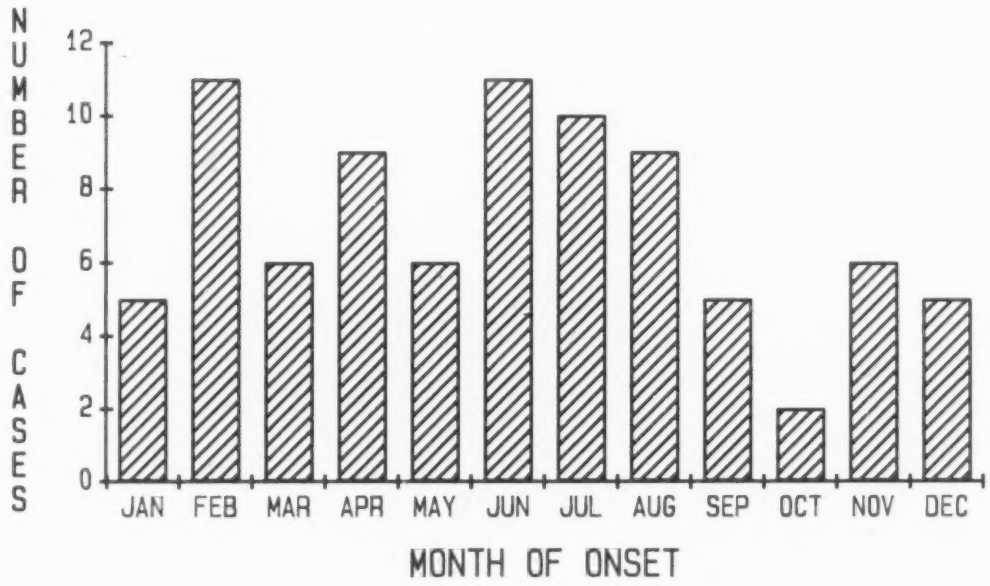
Again the seasonal and age peak incidence suggests probable blood-borne NANB hepatitis accounts for a significant number of these cases. A prospective study is planned to investigate this question.

HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

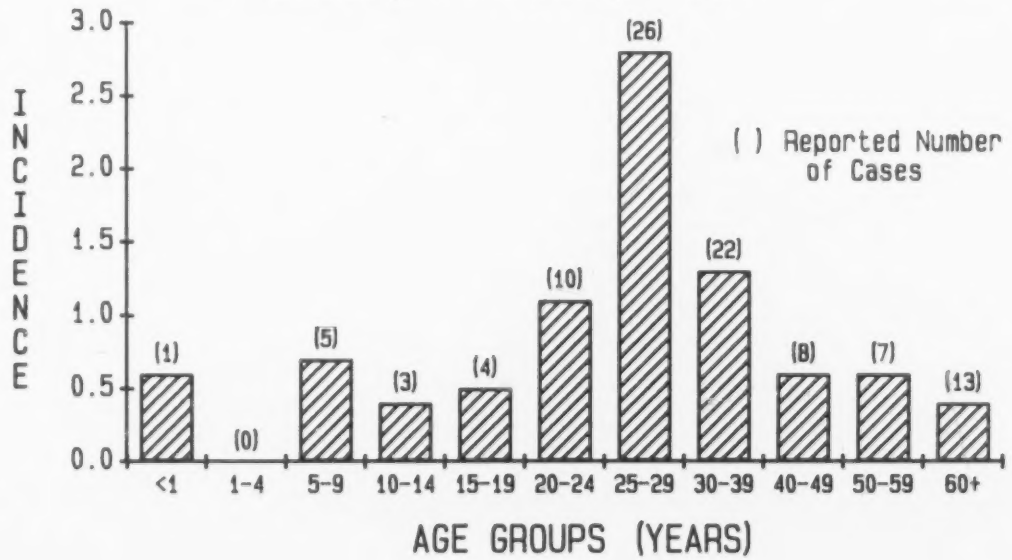
HRS DIST	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR. * MEAN
I	Escambia													2	2	0.7	0.4
	Okaloosa															0.0	0.2
	Santa Rosa															0.0	0.0
	Walton															0.0	2.5
II	Bay															0.0	1.6
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	2.9
	Gulf															0.0	2.9
	Holmes															0.0	0.0
	Jackson															0.0	1.6
	Jefferson															0.0	0.0
	Leon															0.0	3.7
	Liberty															0.0	0.0
	Madison												1		1	6.3	0.0
	Taylor							1							1	5.4	3.7
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	0.0
	Bradford												1		1	4.1	15.4
	Citrus															0.0	1.8
	Columbia															0.0	0.8
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando													1	1	1.2	1.4
	Lafayette											1			1	21.1	0.0
	Lake									1					1	0.7	5.3
	Levy															0.0	0.0
	Marion															0.0	1.6
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	18.6
IV	Baker															0.0	0.0
	Clay				2		1							1	4	4.2	2.3
	Duval															0.0	1.7
	Flagler															0.0	0.0
	Nassau															0.0	3.3
	St. Johns															0.0	0.9
	Volusia				1									1	2	0.6	2.4
V	Pasco							1							1	0.4	2.4
	Pinellas	1	1		1	1	2	3	2				1	2	14	1.7	1.7
VI	Hardee															0.0	3.1
	Highlands															0.0	0.0
	Hillsborough											1			1	0.1	3.0
	Manatee								1			1		3	5	2.7	3.5
	Polk			2	1	3	2	2	3			1	1		15	3.8	7.1
VII	Brevard															0.0	0.3
	Orange	1	6							1					8	1.3	4.7
	Osceola															0.0	0.4
	Seminole	1										1			2	0.8	1.0
VIII	Charlotte			1			2							1	4	4.5	0.0
	Collier									1					1	0.8	2.5
	DeSoto															0.0	3.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee															0.0	0.6
	Sarasota			2				1			1				4	1.6	5.4
IX	Indian River						1						1	1	3	3.6	1.7
	Martin				2	1		1							4	4.5	2.4
	Okeechobee															0.0	0.0
	Palm Beach		1					1	1						3	0.4	0.8
	St. Lucie															0.0	0.6
X	Broward	2	3				3		1	2				1	12	1.0	4.5
XI	Dade			1	2	1			1		1	1		2	9	0.5	0.6
	Monroe															0.0	0.0
STATE TOTAL		5	11	6	9	6	11	10	9	5	2	6	5	15	100	0.8	2.2

*1984-1986 Average rate

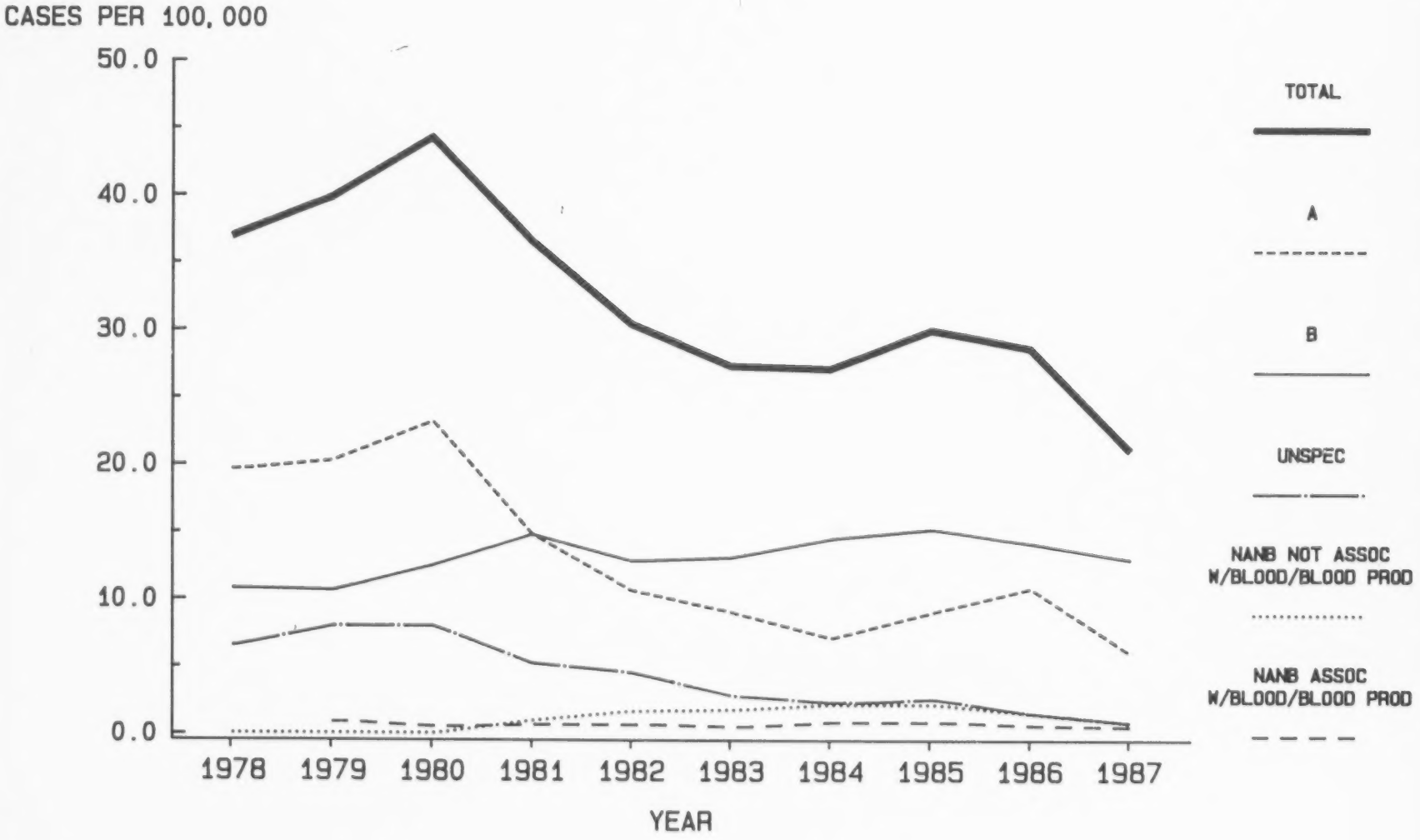
HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



HEPATITIS UNSPECIFIED - REPORTED INCIDENCE PER 100,000 POPULATION BY AGE GROUP, FLORIDA, 1987



HEPATITIS - REPORTED CASE RATES BY YEAR
FLORIDA, 1978-1987



CAMPYLOBACTERIOSIS

In 1987, 1,662 cases of campylobacteriosis were reported to the state. The incidence per 100,000 population was 13.7. This represents an increase of 4.6% over the 1986 incidence (13.1).

The highest age-specific incidence per 100,000 population was in those aged 1-4 years (36.3), followed by the less than 1 year old age group (33.1). A second, smaller peak is noted in the 20-24 year old (22.7) and 25-29 year old (22.7) age groups. Rates for other age groups remained significantly lower.

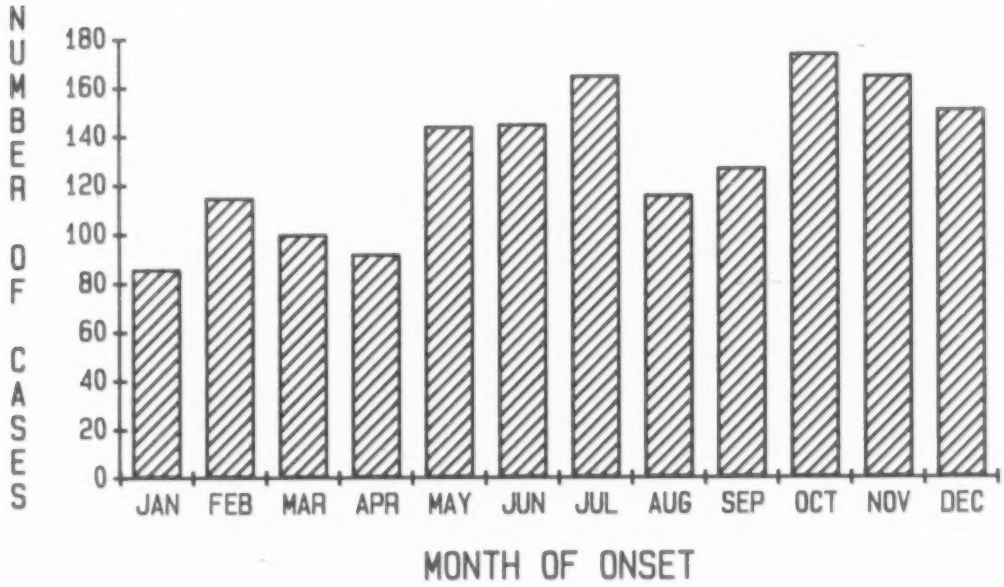
The number of reported cases by month of onset was highest during the period May through July, and again during the fall. Cases of campylobacteriosis were reported from all but 16 of Florida's 67 counties. The highest rates were observed in Taylor (59.0 per 100,000), Leon (52.8 per 100,000), and Columbia (50.4 per 100,000) counties.

CAMPYLOBACTERIOSIS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

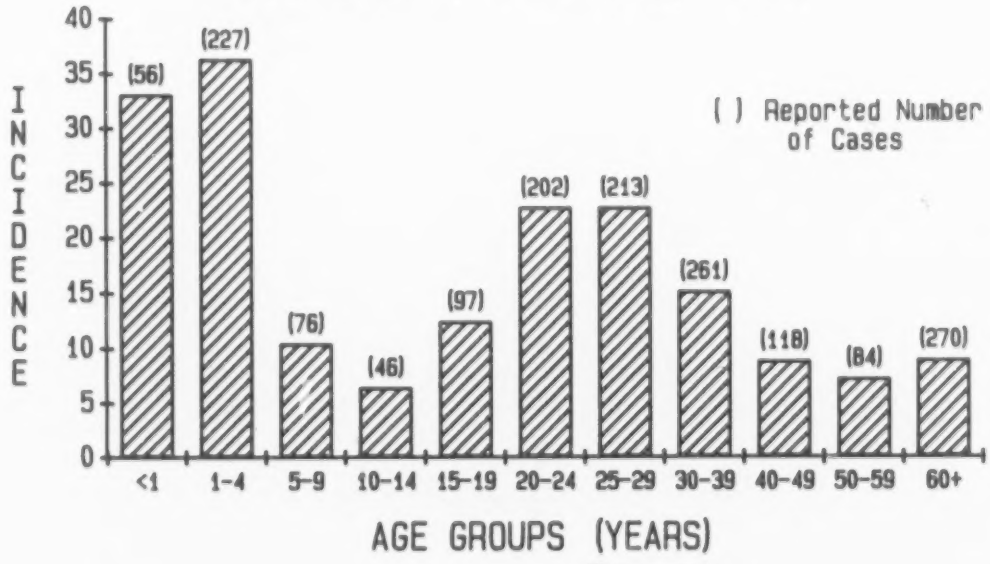
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia	5	2	7	1	5	3	8	3	6	3	10	3	2	57	20.1	9.8
	Okaloosa			1				5		3	9	1			19	12.6	2.4
	Santa Rosa		1		2	1	1	5		1	3		1		15	22.4	15.5
	Walton															0.0	0.0
II	Bay								1	1		1			3	2.3	2.7
	Calhoun													1	1	10.1	17.5
	Franklin															0.0	0.0
	Gadsden	1	1								2		3		7	14.9	11.8
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	5.7
	Leon	4	6	9	5	10	7	6	5	9	10	11	8	5	94	52.8	59.4
	Liberty															0.0	29.2
	Madison															0.0	8.5
	Taylor	2	2	2				1			1		2	1	11	59.0	27.7
	Wakulla	1			2				2				1		6	41.7	22.3
	Washington															0.0	4.4
III	Alachua	4	2	1	3	3	4	3	4	6	6	2	2	3	43	23.6	39.4
	Bradford				1			1						1	3	12.3	4.2
	Citrus								1						1	1.2	1.3
	Columbia	3	1		1	4	1		2	1	4	1		3	21	50.4	50.1
	Dixie															0.0	7.1
	Gilchrist									1					1	13.8	23.2
	Hamilton															0.0	14.4
	Hernando								1				1		2	2.5	0.0
	Lafayette															0.0	14.6
	Lake			1	1	2	1					1	1	2	9	6.6	6.6
	Levy							1							1	4.2	11.7
	Marion	3	4	1	1	4	7	4	4	5	1	3	4	6	47	26.5	29.5
	Putnam	1	3		2	5		1	2	1	1		2		18	29.7	37.6
	Sumter															0.0	2.4
	Suwannee	1											1		2	7.5	0.0
	Union															0.0	21.7
IV	Baker															0.0	1.9
	Clay	2		1		5		1	2	1				1	13	13.6	18.2
	Duval	1	2	5	7	7	7	4	3	5	8	13	9		71	10.6	8.0
	Flagler								2						2	10.6	2.0
	Nassau					1		1						1	3	6.8	1.6
	St. Johns		2			1	3	2	1	1	1				11	14.0	10.3
	Volusia		1	5	1	1	4	3	1	2	3	2	3		26	7.8	9.4
V	Pasco	1			1	1	2			2	7	1	4		19	7.4	8.1
	Pinellas	7	5	7	10	5	5	8	5	8	3	9	5	9	86	10.3	8.6
VI	Hardee									2					2	8.9	9.4
	Highlands			1			1	1							3	4.8	1.1
	Hillsborough	3	1	4	4	5	4	9	12	8	4	9	7		70	8.6	10.5
	Manatee		1				2		1				1	1	6	3.3	5.2
	Polk	1	3	2	3		4	3	1		4	9	3		33	8.4	15.3
VII	Brevard		1	1	2	1	3	2	2		1		1		14	3.7	1.7
	Orange	11	10	10	5	7	16	14	7	8	5	10	10	2	115	19.0	21.7
	Osceola		1	1		1		1		1	1		1		7	7.8	14.8
	Seminole	1	3	4	2	4		6	3	4	6		3		36	14.0	13.4
VIII	Charlotte		2											1	3	3.4	11.1
	Collier	3	2	3	1	2	3	4	5	5	9	7	8	10	62	48.3	42.5
	DeSoto															0.0	0.0
	Glades							1							1	13.5	0.0
	Hendry		1												1	4.1	1.4
	Lee	2	3	1	2	2	2	1		3	6	4	2	2	30	10.2	10.3
	Sarasota	1	1	1	2		2	3	2	2	2	1	2		19	7.5	8.0
IX	Indian River			1	1		1	1			1		1		6	7.1	3.0
	Martin	5	4	3	2	2	2	5	3	2	7	2	6		43	48.7	68.9
	Okeechobee		1				2								3	10.7	10.6
	Palm Beach	10	21	9	10	19	16	30	15	16	24	38	20		228	28.8	29.5
	St. Lucie		2	2		1	1						1		7	5.4	13.9
X	Broward	5	14	6	9	20	22	13	15	11	21	9	15	15	175	14.8	14.1
XI	Dade	8	13	12	11	25	19	17	11	12	21	21	20	15	205	11.4	11.0
	Monroe													1	1	1.3	1.9
STATE TOTAL		86	115	100	92	144	145	165	116	127	174	165	151	82	1662	13.7	14.1

*1984-1986 Average rate

CAMPYLOBACTERIOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



CAMPYLOBACTERIOSIS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



SALMONELLOSIS

In 1987, 2,960 cases of salmonellosis were reported to the state. This represents a decrease from the total number of cases reported in 1986 (3,160). The incidence in 1987 (24.4 per 100,000) was 9.3% lower than the incidence in 1986 (26.9 per 100,000). There was a gradual increase in cases beginning in February (122), peaking in September (379).

The highest age-specific incidence per 100,000 population was in the less than 1 year old age group (354.2) followed by those aged 1-4 (162.6). Incidence then decreased rapidly with increasing age.

Salmonellosis was reported from all but 7 of Florida's 67 counties. The highest incidence per 100,000 population was observed in Leon (65.7), Taylor (64.3), Columbia (62.4), and Hendry (61.4) counties.

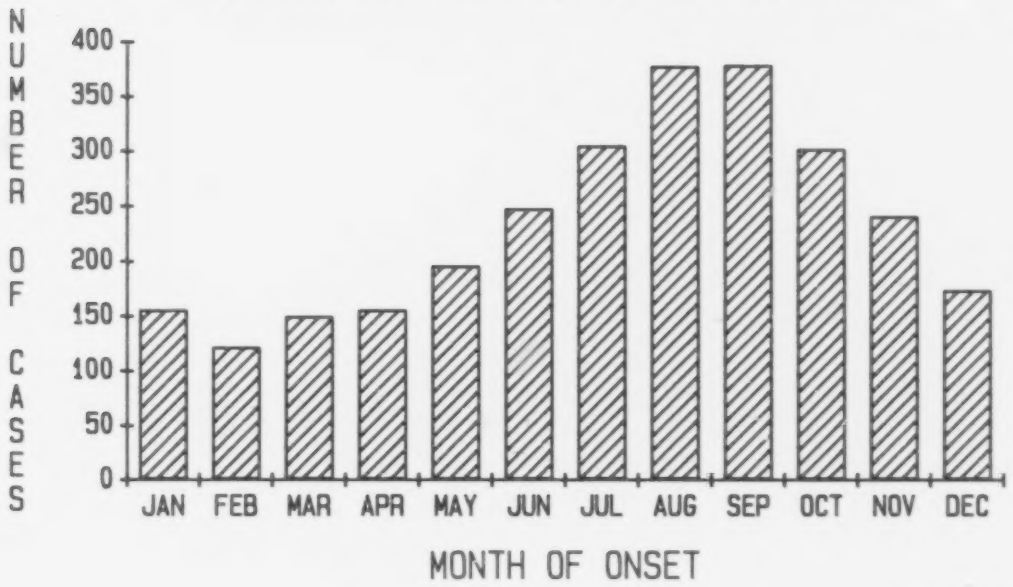
Usually food/waterborne, this disease serves as a marker for inadequate sanitary practices in food preparation (i.e., "too warm or not hot enough"), either in the home or food service industry.

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

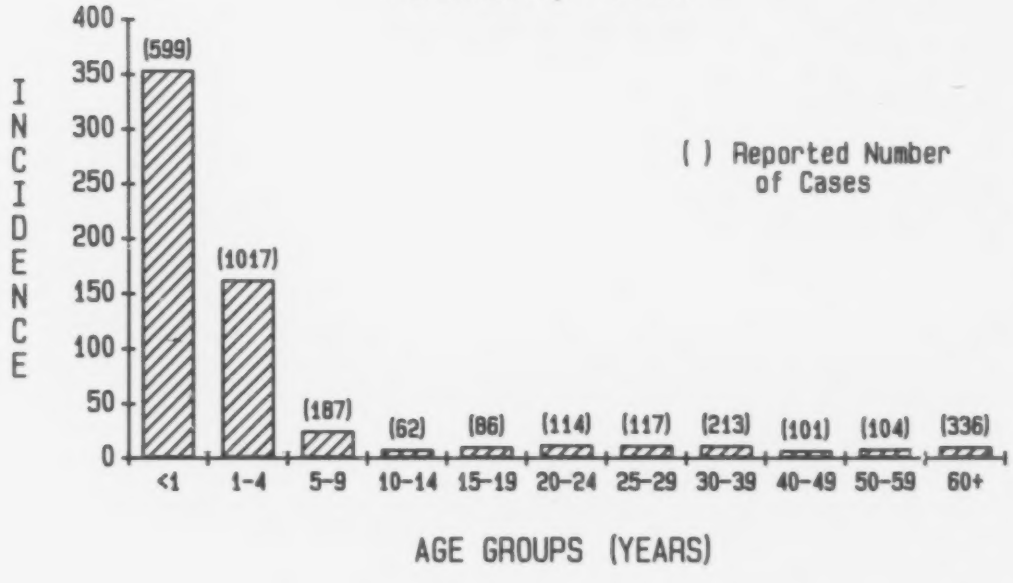
HRS DIST	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia	4	8	4	2	5	4	4	6	9	10	5	2	6	67	23.7	24.1
	Okaloosa	4		1	4	4	7	5	10	6	8	2	5		58	38.4	15.5
	Santa Rosa	1		2	2	3	2	2	7	3	7	3	1		33	49.2	21.2
	Walton							2							2	7.2	27.9
II	Bay	2		5	4	4	10	6	13	6	8	1	1	1	61	46.0	55.3
	Calhoun															0.0	83.9
	Franklin															0.0	0.0
	Gadsden	1		1	1		1	1	5		1	1		1	15	31.9	25.7
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson								1					1	2	4.6	12.2
	Jefferson									1					1	8.4	11.4
	Leon		1	2	1	3	9	10	20	20	13	12	5	21	117	65.7	66.8
	Liberty															0.0	51.1
	Madison					1	4			2					7	43.8	27.6
	Taylor						1	8		1	1	1			12	64.3	48.0
	Wakulla						2				1	1			4	27.8	84.1
	Washington			1			2								3	19.4	19.9
III	Alachua	3	2	3	2	3	7	8	18	9	8	6	1	11	81	44.5	47.6
	Bradford							2		2	1	1			6	24.6	12.6
	Citrus							2	1		1			2	6	7.3	14.3
	Columbia			2	1	1	1		2	9	6	1	1	2	26	62.4	48.5
	Dixie									2					2	20.5	10.6
	Gilchrist				1										1	13.8	13.9
	Hamilton															0.0	18.0
	Hernando			1				1	3	1				1	7	8.7	14.6
	Lafayette							1	1						2	42.2	36.5
	Lake		1	1	1	1	4	2	3		3	3	5	3	27	19.8	24.7
	Levy				1					2			2		5	21.0	14.6
	Marion	4		2	1	4	1	5	7	3	6	10	7	10	60	33.9	35.9
	Putnam				2	3	1	5	2	2	1		2		18	29.7	49.1
	Sumter	1	1		1		1		1				1		6	20.2	86.2
	Suwannee							2	1	3	2	1			9	33.9	1.3
	Union						1		1	1	2				5	45.5	15.5
IV	Baker															0.0	24.6
	Clay	2		1		3	5	3	8	3	3	2	1	1	32	33.5	28.5
	Duval	8	14	5	10	5	18	24	21	21	19	19	11	1	176	26.3	26.7
	Flagler						1			1		1		1	4	21.2	25.9
	Nassau	1				1	2	2	1		1			1	9	20.5	27.8
	St. Johns					1	1	3	3	2	1	2	1		14	17.9	21.1
	Volusia	8	3	3	4	9	6	14	10	13	14	7	4	4	99	29.7	41.3
V	Pasco	5	4	5	5	7	4	5	11	7		13	3		69	26.9	18.9
	Pinellas	6	7	7	5	7	6	9	14	24	8	6	6	8	113	13.5	11.9
VI	Hardee									1		1			2	8.9	24.9
	Highlands		1				2	3			2	1			9	14.3	7.8
	Hillsborough	3	4	4	7	11	20	14	22	18	5	4	12	1	125	15.4	16.7
	Manatee	2	1	3	6	4	2	2	4	4	6	5	2	5	46	25.3	25.2
	Polk	10	7	8	7	5	10	10	14	23	7	14	8	4	127	32.4	49.2
VII	Brevard	13	8	3	4	3	8	4	16	16	16	10	4		105	27.9	25.6
	Orange	6	8	7	14	18	21	33	33	22	18	17	16	4	217	35.8	31.1
	Osceola			1	3	4	1		4	9	5		1	1	29	32.2	37.3
	Seminole	6	6	4	2	2	8	18	16	12	9	11	9		103	40.1	32.0
VIII	Charlotte	1	5	5	1		2	3			2	1	2	3	25	28.3	39.0
	Collier	2	7	3	1	2	7	3	4	7	4	1	3	6	50	39.0	36.6
	DeSoto		1				1	1	1	2	3			1	10	43.4	97.3
	Glades							1		1					2	27.1	18.9
	Hendry		1	2	4	2		1		2	1	2			15	61.4	34.4
	Lee	8	6	6	1	8	5	12	7	8	11	7	3	1	83	28.2	17.9
	Sarasota	4	2	8	7	1	9	3	2	8	6	7	7		64	25.1	28.7
IX	Indian River				2		1	1		3	4	2	1		14	16.6	13.6
	Martin	3	1		2	3	4	1	3	5	3	1		1	27	30.6	38.5
	Okeechobee				1	2	1		2	2	2	2			12	43.0	49.1
	Palm Beach	21	7	23	6	17	13	25	25	26	20	14	15		212	26.8	25.4
	St. Lucie		2	2	4	2	1	1	2	4	2	2	2		24	18.7	16.4
X	Broward	14	12	8	14	20	14	20	32	20	25	20	19	24	242	20.5	15.9
XI	Dade	13	6	14	21	21	13	23	21	32	24	19	10	27	244	13.6	10.7
	Monroe		1	1	1	1	4			1	2	2	1		14	18.7	5.1
STATE TOTAL		156	122	150	156	196	248	305	378	379	302	241	174	153	2960	24.4	23.7

*1984-1986 Average rate

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



SALMONELLOSIS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



SHIGELLOSIS

In 1987, 818 cases of shigellosis were reported to the state. This represents an increase from the 800 cases reported in 1986. The incidence in 1987 (6.8 per 100,000) did not change from the rate in 1986 (6.8).

The seasonal trend was an increase beginning in April and peaking in June, before gradually declining through the Fall and Winter months.

Children aged 1-4 had the highest reported incidence of illness per 100,000 population (53.4), which represents a 1.3% decrease from the 1986 incidence (54.1). This continues for a second year, a decrease in incidence in this age group. There had been an increase over the 3 year period previous to 1986. The next highest incidence was observed in the 5-9 year old age group (17.4). Incidence was relatively low for the remaining age groups.

Shigellosis cases were reported from all but 19 of Florida's 67 counties. The highest rate per 100,000 population was observed in Martin (43.1) and Orange (32.5) counties.

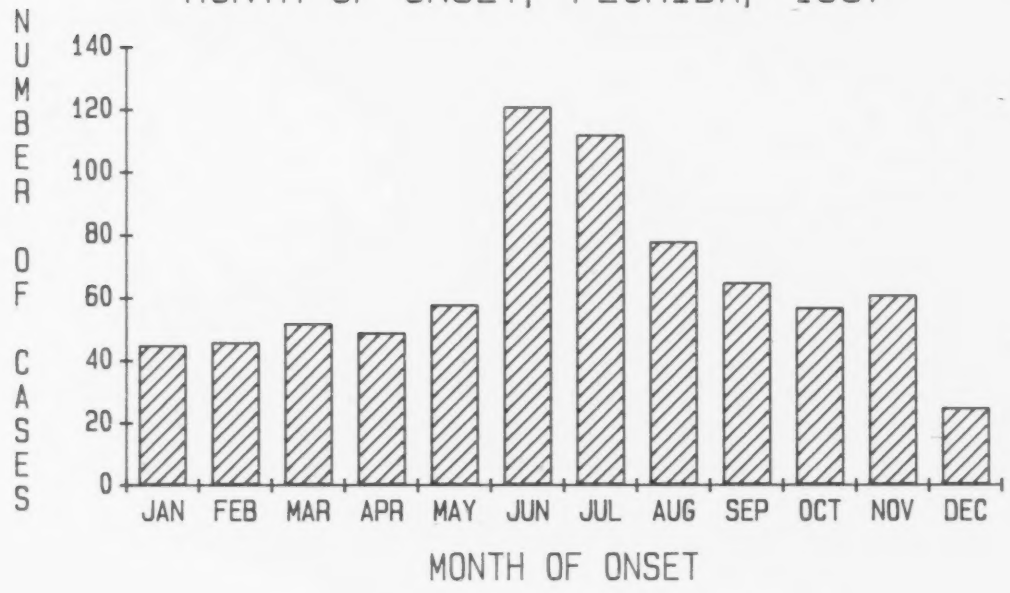
Usually spread person to person via fecal/oral route, this disease serves as a marker for day care crowding and or inadequate personal hygiene facilities/practices.

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

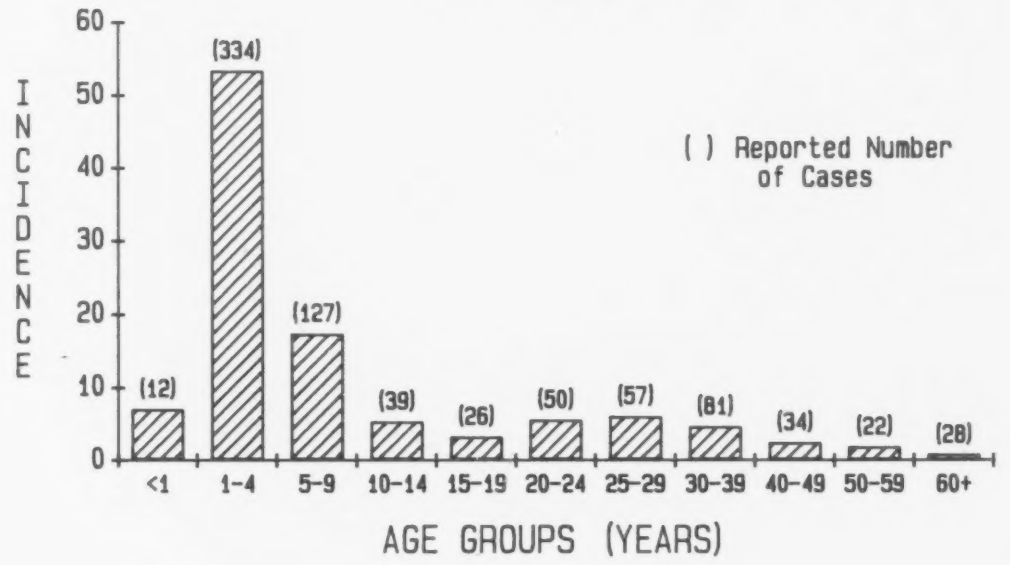
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia						1		1					1	3	1.1	2.0
	Okaloosa							2							2	1.3	1.0
	Santa Rosa	1										4			5	7.5	0.0
	Walton									1					1	3.6	1.3
II	Bay			1				1		1		2			5	3.8	7.1
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden				2										2	4.3	11.8
	Gulf															0.0	0.0
	Holmes															0.0	2.1
	Jackson									1					1	2.3	18.6
	Jefferson															0.0	0.0
	Leon	1		2	1	1		2						4	11	6.2	44.4
	Liberty															0.0	0.0
	Madison															0.0	17.0
	Taylor							1							1	5.4	18.5
	Wakulla							2							2	13.9	44.5
	Washington															0.0	2.2
III	Alachua		1	3				2			1	1		3	11	6.0	36.2
	Bradford															0.0	0.0
	Citrus						1			2					3	3.6	1.3
	Columbia						1				2				3	7.2	10.0
	Dixie															0.0	0.0
	Gilchrist	1													1	13.8	18.6
	Hamilton															0.0	0.0
	Hernando					1									1	1.2	1.9
	Lafayette															0.0	14.6
	Lake	1		1				2	4			1			9	6.6	9.7
	Levy															0.0	7.3
	Marion		1				1								2	1.1	15.0
	Putnam	1	1					1	1	1					5	8.3	8.1
	Sumter															0.0	2.4
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker								1						1	5.4	7.6
	Clay	2				1		1			1				5	5.2	2.3
	Duval			6	5	1	4	6	1		2	4	1		30	4.5	10.7
	Flagler		1												1	5.3	0.0
	Nassau															0.0	1.6
	St. Johns						1	3							4	5.1	1.9
	Volusia		1	1					4	1	1	1		2	11	3.3	3.1
V	Pasco		1		1			1	3						6	2.3	11.3
	Pinellas		2			1		1	1						5	0.6	2.4
VI	Hardee											1			1	4.5	20.3
	Highlands			1											1	1.6	0.6
	Hillsborough	6	3	4	5	6	4	5	5	7	7	5	2		59	7.3	12.3
	Manatee					1	1		1	3				2	8	4.4	2.9
	Polk	4	2	3		4	2	2		3	2		4		26	6.6	51.1
VII	Brevard				2	2	2	1	3	2	4	2		1	19	5.0	2.9
	Orange	2	6	15	2	15	50	37	20	8	11	19	4	8	197	32.5	8.3
	Osceola															0.0	2.5
	Seminole	2	2	3	2	3	20	6	8	8	4	1	1	1	61	23.0	4.4
VIII	Charlotte									1					1	1.1	47.6
	Collier							2	2			1			5	3.9	15.7
	DeSoto	1									1				2	8.7	144.5
	Glades															0.0	0.0
	Hendry			1											1	4.1	2.9
	Lee	2		1	1		1	1		1	2			3	12	4.1	1.7
	Sarasota							1	2			1			4	1.6	1.2
IX	Indian River	1					1	4							6	7.1	3.8
	Martin	2	4		5	2	12	3	1	3		3	1	2	38	43.1	10.0
	Okeechobee	1			2		1		1						5	17.9	21.2
	Palm Beach	7	11	3	8	3	6	13	6	4	4	4	3		72	9.1	13.8
	St. Lucie												2		2	1.6	4.4
X	Broward	3	1		2	4		3	1	8	5	4	4	9	44	3.7	8.7
XI	Dade	7	9	7	11	13	12	9	12	10	10	7	3	10	120	6.7	5.1
	Monroe													3	3	4.0	0.9
STATE TOTAL		45	46	52	49	58	121	112	78	65	57	61	25	49	818	6.8	9.9

*1984-1986 Average rate

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



SHIGELLOSIS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



VIBRIO INFECTIONS

In 1987, there was a total of 81 reported vibrio infections, including Vibrio parahaemolyticus (30 cases), Vibrio cholerae non-01 (19), Vibrio vulnificus (14), Vibrio hollisae (11), Vibrio mimicus (5), Vibrio fluvialis (1), and Vibrio alginolyticus (1).

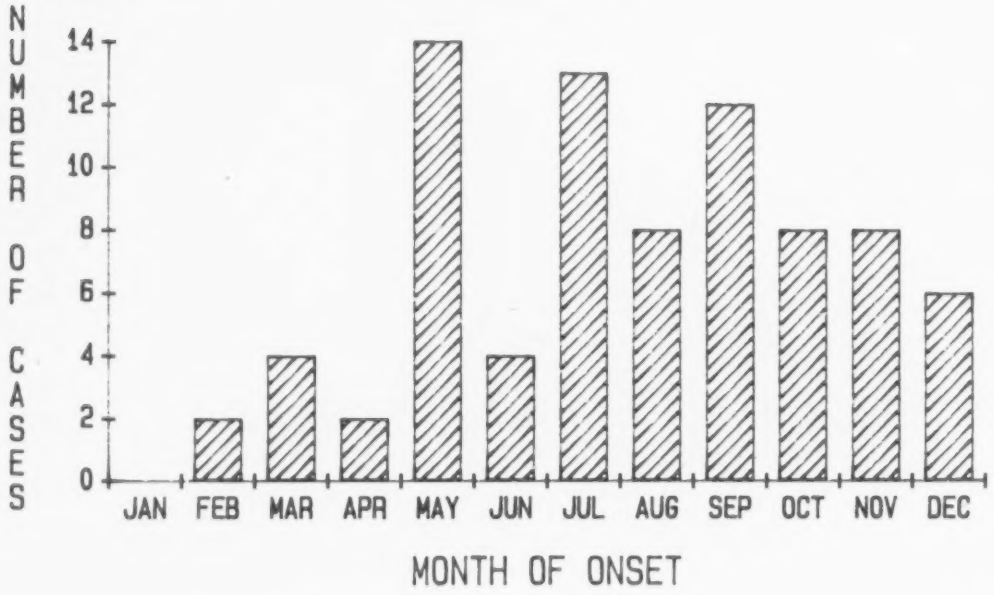
The median age of patients was 40 years. Seventy percent of patients were male. The county reporting the most infections was Leon (16), followed by Bay (11), and Duval and Hillsborough (7 each). The month with the peak number of cases was May (14), followed by July (13), and September (12). Fifty-five percent of the cases were associated with raw oyster consumption, and seventeen percent with wounds.

VIBRIO INFECTIONS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

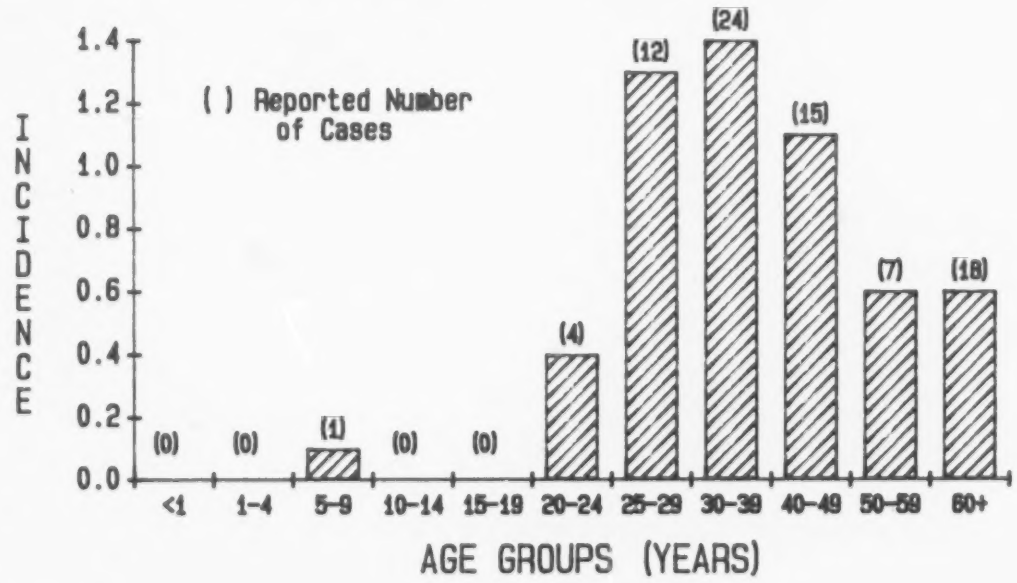
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia				1	1		2							4	1.4	1.0
	Okaloosa					1				1					2	1.3	0.5
	Santa Rosa					1									1	1.5	0.0
	Walton															0.0	0.0
II	Bay					1		1		2			2		14	10.6	0.6
	Calhoun															0.0	0.0
	Franklin															0.0	4.0
	Gadsden		1												1	2.1	0.7
	Gulf															0.0	0.0
	Holmes															0.0	2.1
	Jackson									2		1			3	6.9	0.0
	Jefferson															0.0	0.0
	Leon			1	1	3				2	1	4	4		16	9.0	6.5
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor										1				1	5.4	1.8
	Wakulla															0.0	10.0
	Washington											1			1	6.5	0.0
III	Alachua									1		1			2	1.1	0.0
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	0.8
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.5
	Lake															0.0	0.0
	Levy														1	0.6	0.0
	Marion								1						1	1.7	0.0
	Putnam										1					0.0	1.2
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	0.7
	Clay														7	1.0	0.4
	Duval		1				3	1	1		1					0.0	0.0
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns														1	0.3	1.2
	Volusia								1							0.0	0.3
V	Pasco														3	0.4	0.2
	Pinellas				1		1				1					0.0	0.0
VI	Hardee															0.0	0.0
	Highlands														7	0.9	1.2
	Hillsborough			1		1	1	1	1		1					0.0	0.2
	Manatee															0.0	0.3
	Polk															0.0	0.3
VII	Brevard														2	0.3	0.1
	Orange						1				1					0.0	0.0
	Osceola															0.0	0.2
	Seminole															0.0	0.0
VIII	Charlotte														1	0.8	0.6
	Collier										1					0.0	0.0
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry														3	1.0	0.3
	Lee								2			1				0.0	0.4
	Sarasota															0.0	0.0
IX	Indian River											1			1	1.1	1.2
	Martin															0.0	0.0
	Okeechobee						1	1			1		1		4	0.5	0.7
	Palm Beach								1						1	0.8	0.8
	St. Lucie							1	1						3	0.3	0.1
X	Broward				1							1			1	0.1	0.1
XI	Dade															0.0	0.0
	Monroe																
STATE TOTAL		0	2	4	2	14	4	13	8	12	8	8	6	0	8	0.7	0.4

*1984-1986 Average rate

VIBRIO INFECTIONS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



VIBRIO INFECTIONS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



VIBRIO INFECTIONS - Reported laboratory confirmed cases, by county, Florida, 1987

COUNTY	Vibrio Alginolyticus	Vibrio Cholerae 01	Vibrio Cholera Non-01	Vibrio Fluvialis	Vibrio Hollisae	Vibrio Mimicus	Vibrio Parahaemolyticus	Vibrio Vulnificus
Alachua							2	
Baker								
Bay	1		3		1		6	3
Bradford								
Brevard								
Broward			1					2
Calhoun								
Charlotte								
Citrus								
Clay								
Collier								
Columbia								
Dade			1					
DeSoto								
Dixie								
Duval			1		1		2	3
Escambia							4	
Flagler								
Franklin								
Gadsden			1					
Gilchrist								
Glades								
Gulf								
Hamilton								
Hardee								
Hendry								
Hernando								
Highlands								
Hillsborough			2		2	1	1	1
Holmes								
Indian River								
Jackson			1			1	1	
Jefferson								
Lafayette								
Lake								
Lee								3
Leon			3		6	3	1	
Levy								
Liberty								
Madison								
Manatee								
Marion			1					
Martin							1	
Monroe								
Nassau								
Okaloosa							1	1
Okeechobee								
Orange							2	
Osceola								
Palm Beach							3	1
Pasco								
Pinellas			1				2	
Polk								
Putnam					1			
St. Johns								
St. Lucie			1					
Santa Rosa			1					
Sarasota								
Seminole								
Sumter								
Suwannee								
Taylor			1					
Union								
Volusia				1				
Wakulla								
Walton								
Washington			1					
STATE TOTAL	1	0	19	1	11	5	30	14

SECTION 3:

Summary of Vaccine Preventable Diseases of Childhood

Prepared by Immunization Program
Henry T. Janowski, M.P.H., Program Supervisor

MEASLES (RUBEOLA)

In 1987, 126 cases of measles were reported to the state, which represents a 68.5% decrease from the total number of cases reported in 1986 (400). The incidence in 1987 (1.0 per 100,000) decreased 70.6% from the incidence in 1986 (3.4 per 100,000).

The greatest number of cases, 51 (40.5% of the state total), was reported in Dade County. Seventy percent of the Dade cases were reported during March (23 cases), and April (13 cases). Duval County reported 31 cases from June through November with 19 cases (61.3%) reported in October.

Statewide, children aged 1-4 (42 cases) had the highest incidence of illness (6.7 per 100,000). The 10-14 year old age group contributed 32 cases (4.4 per 100,000) followed by the 5-9 year old age group contributing 15 cases (2.1 per 100,000).

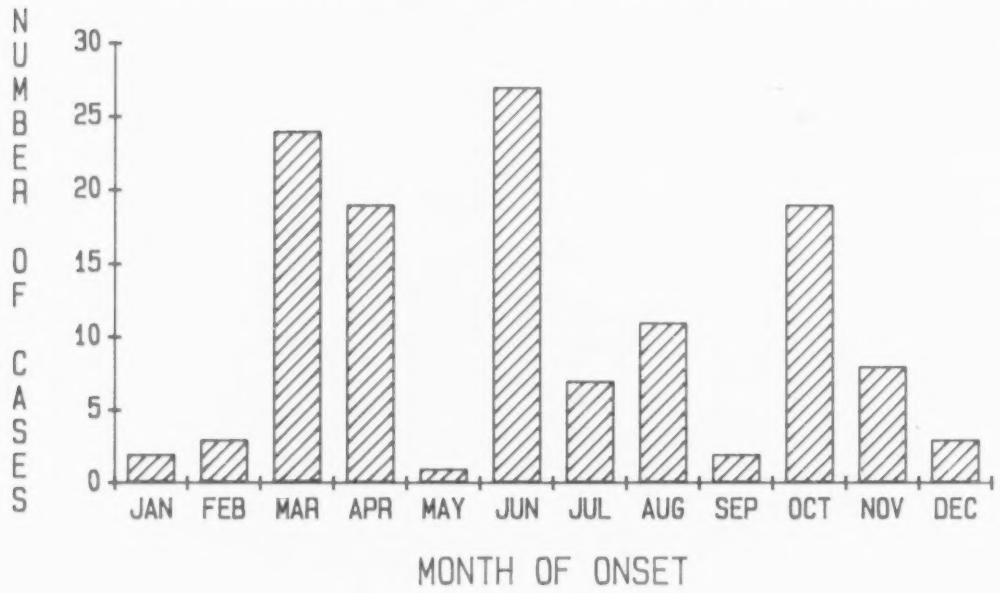
There were two main outbreaks in Florida this year. The one in Dade County, which occurred predominantly in preschool children, was apparently a continuation of the 1986 outbreak revolving around a hospital emergency room. Secondly, an outbreak occurring in Duval County during the fall started at a junior high school and was predominantly in an immunized school-age population.

MEASLES (RUBEOLA) - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

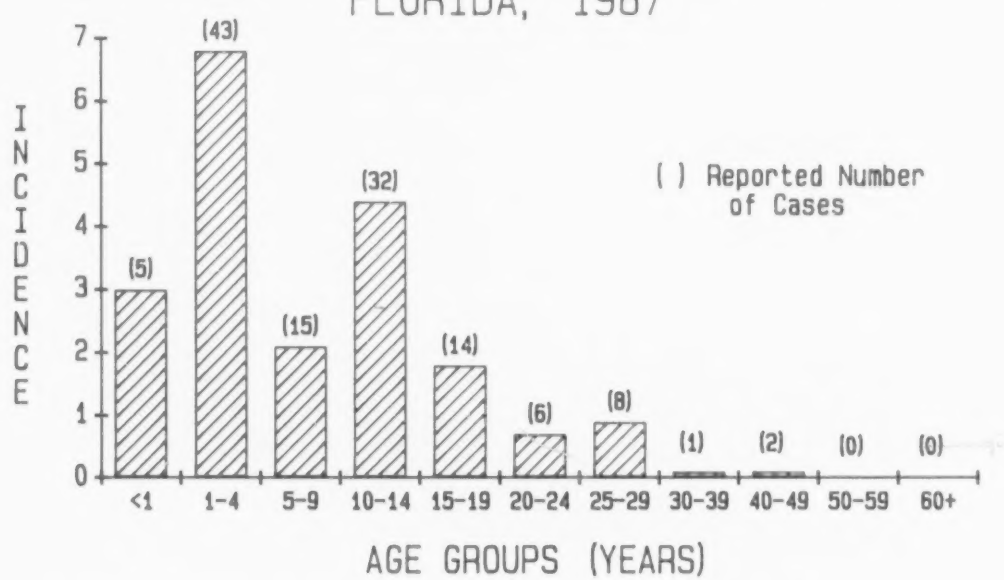
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.0
	Santa Rosa															0.0	0.0
	Walton															0.0	0.0
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon						7								7	3.9	1.4
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla							1	1						2	13.9	0.0
	Washington															0.0	0.0
III	Alachua					1	3								4	2.2	3.6
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	105.3
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	7.2
	Hernando															0.0	0.5
	Lafayette															0.0	0.0
	Lake															0.0	0.0
	Levy															0.0	0.0
	Marion															0.0	1.2
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	12.4
IV	Baker															0.0	3.8
	Clay															0.0	5.3
	Duval						2	3		2	19	5			31	4.6	0.5
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	3.3
	Volusia				3										3	0.9	0.0
V	Pasco															0.0	0.3
	Pinellas								2			1			3	0.4	0.1
VI	Hardee															0.0	3.1
	Highlands															0.0	0.0
	Hillsborough															0.0	1.0
	Manatee															0.0	0.0
	Polk				2		1								3	0.8	0.2
VII	Brevard															0.0	0.0
	Orange				1		1						2		4	0.7	5.4
	Osceola															0.0	0.8
	Seminole												1		1	0.4	3.4
VIII	Charlotte															0.0	0.0
	Collier								1						1	0.8	0.0
	DeSoto											2			2	8.7	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee															0.0	0.0
	Sarasota															0.0	0.0
IX	Indian River															0.0	0.0
	Martin						7	1							8	9.1	0.0
	Okeechobee															0.0	0.0
	Palm Beach			1			4								5	0.6	0.4
	St. Lucie						1								1	0.8	0.0
X	Broward															0.0	0.1
XI	Dade	2	3	23	13		1	2	7						51	2.8	5.2
	Monroe															0.0	0.0
STATE TOTAL		2	3	24	19	1	27	7	11	2	19	8	3	0	126	1.0	1.8

*1984-1986 Average rate

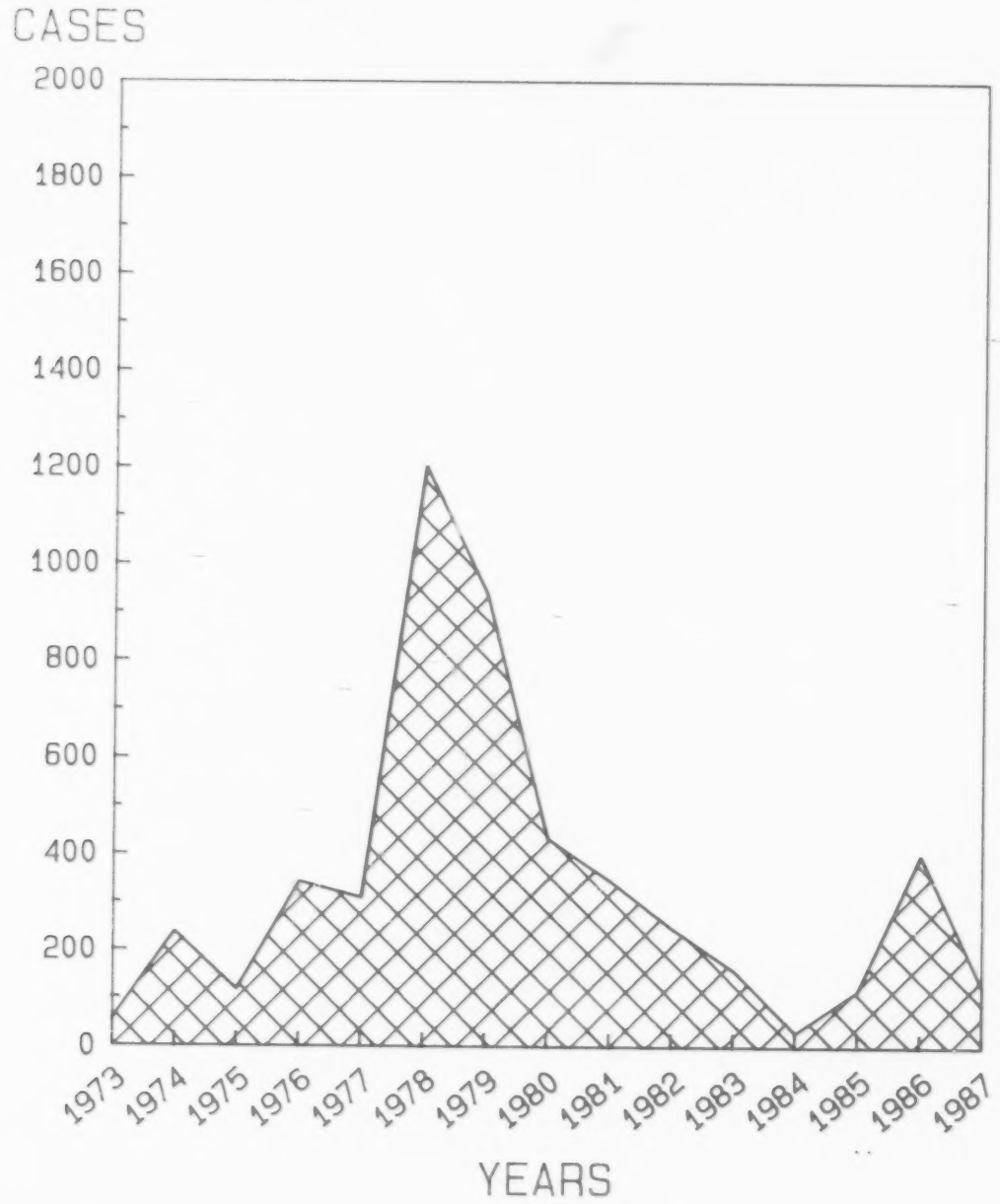
MEASLES (RUBEOLA) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



MEASLES (RUBEOLA) - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



MEASLES (RUBEOLA) CASES REPORTED
FLORIDA, 1973-1987



MUMPS

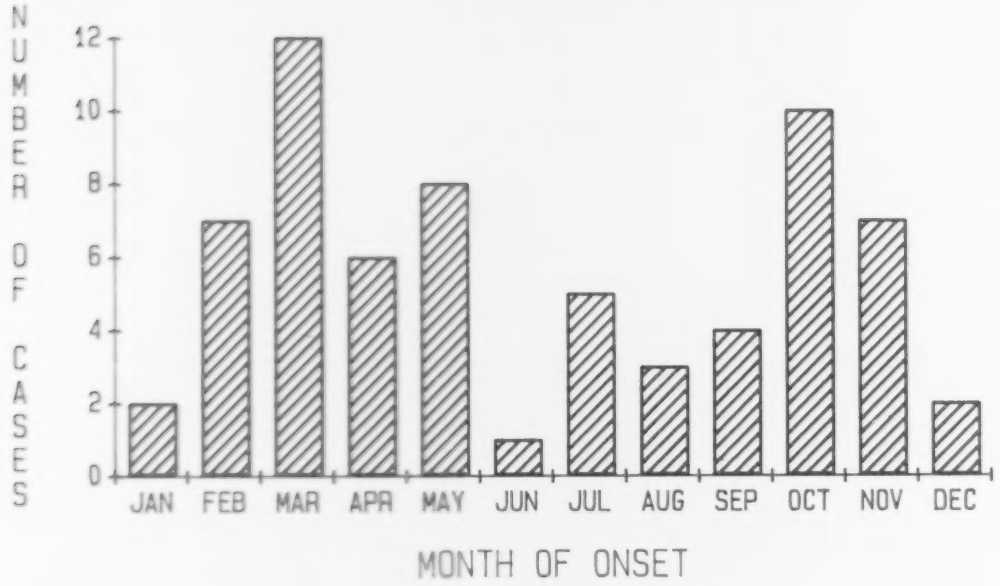
In 1987, 67 cases of mumps were reported, which represents a 7.5% increase from the total number of cases reported in 1986 (62). No seasonal variation was noted. The incidence in 1987 (0.6 per 100,000) increased from the incidence in 1986 (0.5 per 100,000). Children aged 5-9 had the highest incidence (3.8 per 100,000) with 28 cases. The 1-4 year old age group contributed 10 cases (1.6 per 100,000).

MUMPS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

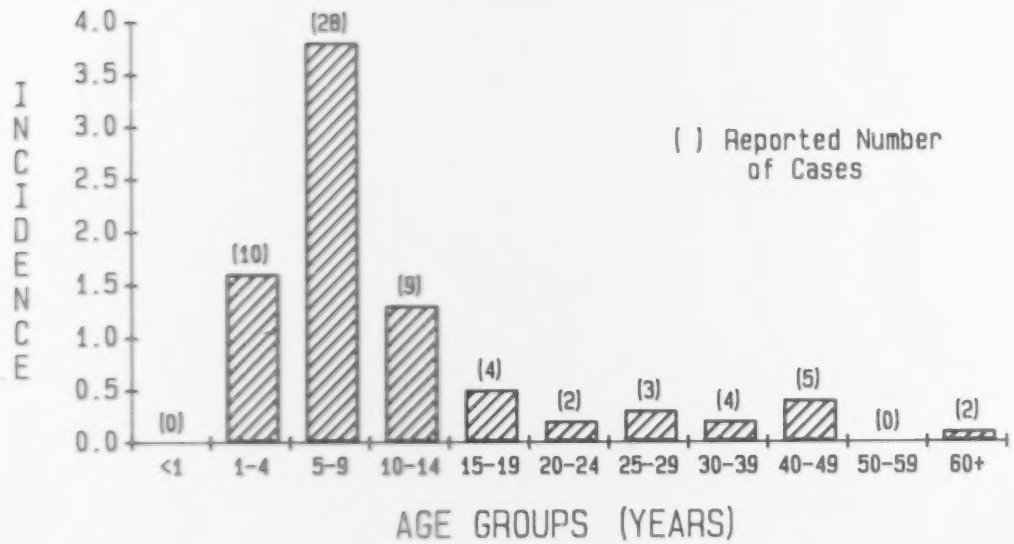
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.0
	Santa Rosa															0.0	1.0
	Walton			2											2	7.2	0.0
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf										2				2	16.8	0.0
	Holmes															0.0	0.0
	Jackson		1			3	1	1							6	13.9	0.0
	Jefferson															0.0	0.0
	Leon			1											1	0.6	1.2
	Liberty															0.0	0.0
	Madison										1				1	6.3	4.2
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua															0.0	0.8
	Bradford															0.0	1.4
	Citrus										1				1	1.2	0.0
	Columbia			1									1		2	4.8	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	9.3
	Hamilton															0.0	0.0
	Hernando	1		1	1	1					1				5	6.2	5.6
	Lafayette															0.0	0.0
	Lake															0.0	0.5
	Levy															0.0	0.0
	Marion															0.0	0.0
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union								1						1	9.1	0.0
IV	Baker															0.0	1.9
	Clay		1	1							1				3	3.1	1.1
	Duval															0.0	0.2
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	1.9
	Volusia				2			2			1	3	1		9	2.7	1.6
V	Pasco															0.0	0.0
	Pinellas					1									1	0.1	0.5
VI	Hardee															0.0	3.1
	Highlands															0.0	0.0
	Hillsborough			2		1		1				1			5	0.6	0.9
	Manatee									2					2	1.1	0.0
	Polk		1	2						1		2			6	1.5	1.0
VII	Brevard															0.0	0.2
	Orange															0.0	0.0
	Osceola		1												1	1.1	1.2
	Seminole	1													1	0.4	2.1
VIII	Charlotte		1												1	1.1	0.0
	Collier															0.0	6.2
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry															0.0	4.3
	Lee				1										1	0.3	0.2
	Sarasota										1				1	0.4	0.5
IX	Indian River			1											1	1.2	0.0
	Martin															0.0	0.8
	Okeechobee															0.0	0.0
	Palm Beach		1	1	1	1		1		1	2	1			9	1.1	0.9
	St. Lucie								2						2	1.6	0.0
X	Broward		1		1	1									3	0.3	0.0
XI	Dade															0.0	0.0
	Monroe															0.0	0.0
STATE TOTAL		2	7	12	6	8	1	5	3	4	10	7	2	0	67	0.6	0.5

*1984-1986 Average rate

MUMPS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



MUMPS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



PERTUSSIS

In 1987, 53 cases of pertussis were reported, which represents a 35.4% decrease from 1986 (82). The incidence in 1987 (0.4 per 100,000) decreased from the incidence in 1986 (0.7 per 100,000).

The highest number of cases reported (17) was in the month of August.

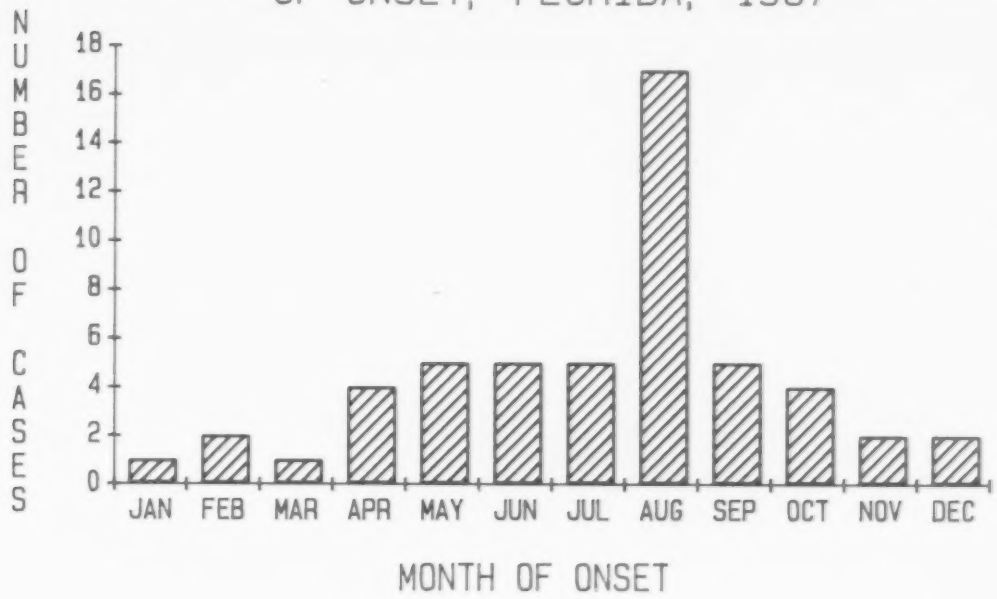
Children less than one year of age had the highest occurrence, 27 cases (16.0 per 100,000), followed by 1-4 year olds, 17 cases (2.7 per 100,000).

PERTUSSIS - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

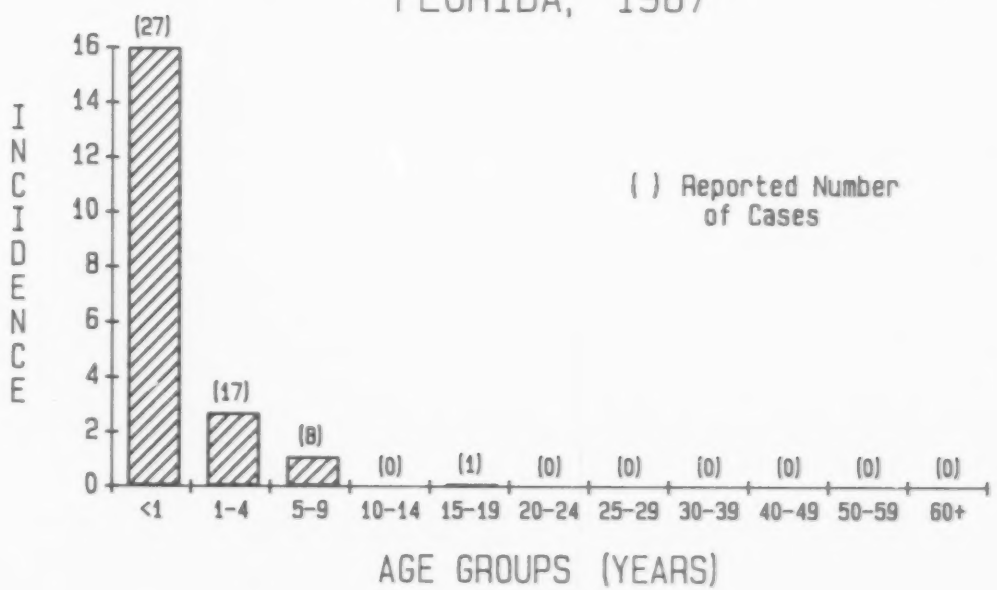
HRS DIST.	COUNTY	JAN-	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3—YR.* MEAN
I	Escambia				1			1							2	0.7	0.0
	Okaloosa															0.0	0.2
	Santa Rosa															0.0	0.0
	Walton															0.0	0.0
II	Bay															0.0	0.0
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon					2									2	1.1	0.8
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua								2						2	1.1	3.0
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.5
	Lafayette															0.0	0.0
	Lake															0.0	1.1
	Levy															0.0	0.0
	Marion															0.0	0.6
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	3.8
	Clay			1											1	1.0	4.6
	Duval					1	2								3	0.4	1.2
	Flagler															0.0	0.0
	Nassau											1			1	2.3	0.0
	St. Johns															0.0	1.9
	Volusia				1		1				2				4	1.2	0.5
V	Pasco															0.0	0.1
	Pinellas						1		1						2	0.2	0.5
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough												1		1	0.1	0.6
	Manatee															0.0	0.8
	Polk		1		1			2	9	2					15	3.8	2.9
VII	Brevard	1				1									2	0.5	1.1
	Orange															0.0	0.0
	Osceola															0.0	0.0
	Seminole															0.0	0.0
VIII	Charlotte															0.0	0.0
	Collier		1												1	0.8	0.6
	DeSoto															0.0	0.0
	Glades															0.0	0.0
	Hendry						1								1	4.1	5.7
	Lee				1	1									2	0.7	0.4
	Sarasota															0.0	0.3
IX	Indian River															0.0	0.0
	Martin															0.0	2.0
	Okeechobee															0.0	0.0
	Palm Beach															0.0	0.5
	St. Lucie							1							1	0.8	2.2
X	Broward							1	3	2	1	1			8	0.7	0.5
XI	Dade								2	1	1		1		5	0.3	0.5
	Monroe															0.0	2.3
STATE TOTAL		1	2	1	4	5	5	5	17	5	4	2	2		53	0.4	0.7

*1984-1986 Average rate

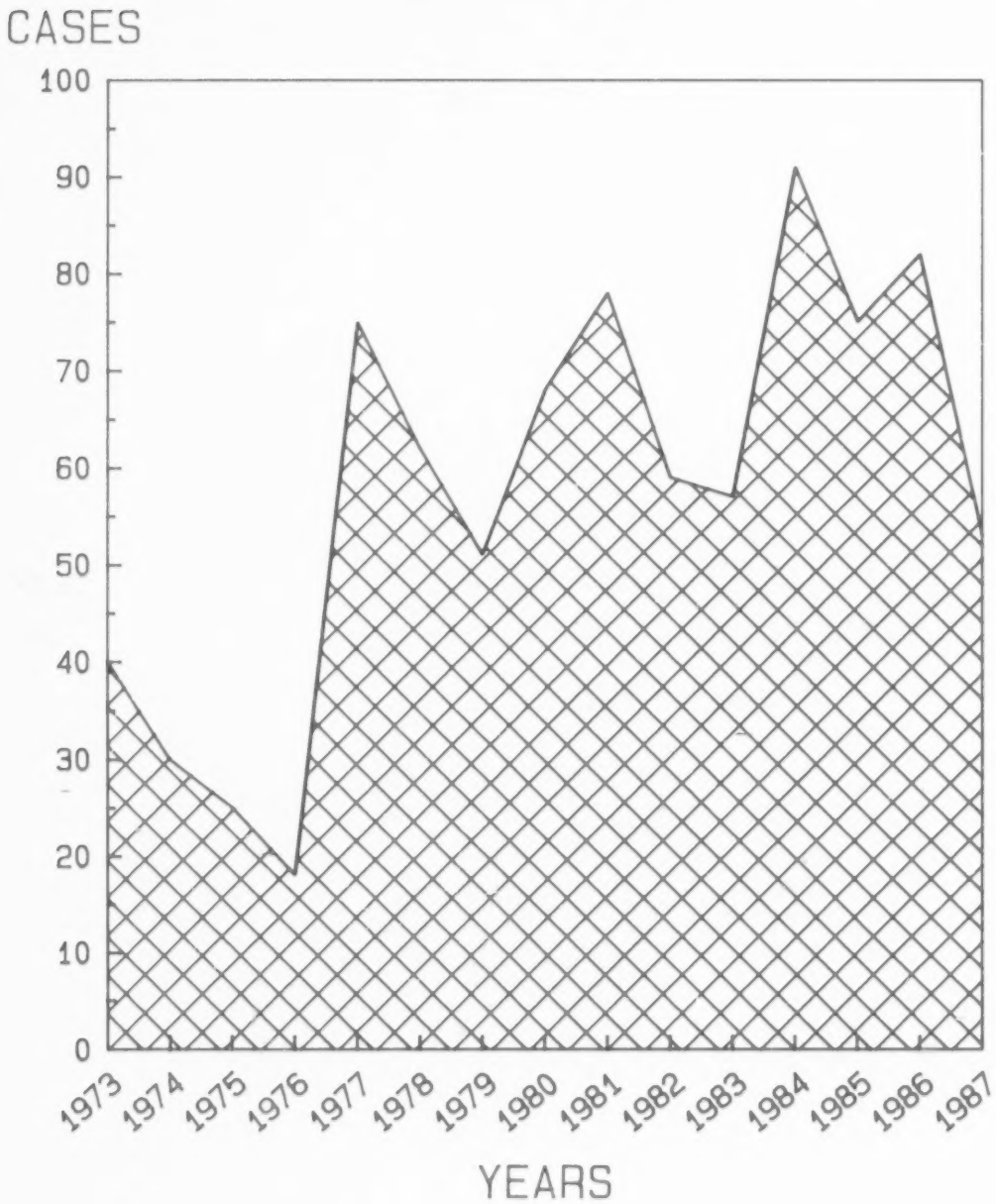
PERTUSSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



PERTUSSIS - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



PERTUSSIS CASES REPORTED
FLORIDA, 1973-1987



RUBELLA

In 1987, 10 cases of rubella were reported to the state, which represents a 16.7% decrease from 1986 (12). The incidence in 1987 (0.1 per 100,000) was the same as the 1986 incidence.

The highest number of cases (3) was reported in February.

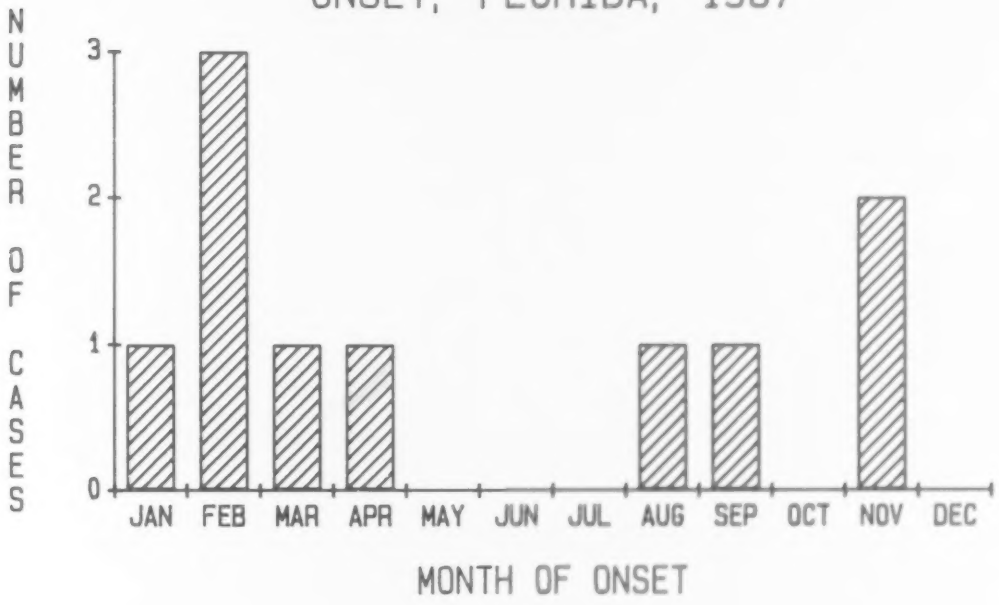
Children aged 1-4 had the highest incidence with five reported cases (0.8 per 100,000). No congenital rubella has been reported since 1981.

RUBELLA - REPORTED CASES BY MONTH OF ONSET AND INCIDENCE PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1987

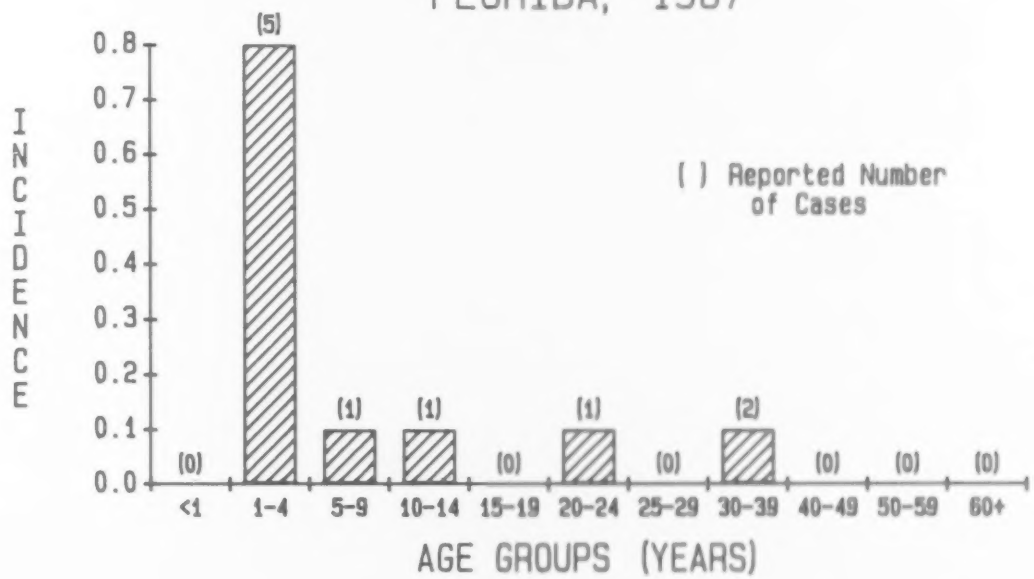
HRS DIST.	COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
I	Escambia															0.0	0.0
	Okaloosa															0.0	0.0
	Santa Rosa															0.0	0.0
	Walton															0.0	3.8
II	Bay															0.0	0.5
	Calhoun															0.0	0.0
	Franklin															0.0	0.0
	Gadsden															0.0	0.0
	Gulf															0.0	0.0
	Holmes															0.0	0.0
	Jackson															0.0	0.0
	Jefferson															0.0	0.0
	Leon															0.0	0.0
	Liberty															0.0	0.0
	Madison															0.0	0.0
	Taylor															0.0	0.0
	Wakulla															0.0	0.0
	Washington															0.0	0.0
III	Alachua											1			1	0.5	0.8
	Bradford															0.0	0.0
	Citrus															0.0	0.0
	Columbia															0.0	0.0
	Dixie															0.0	0.0
	Gilchrist															0.0	0.0
	Hamilton															0.0	0.0
	Hernando															0.0	0.0
	Lafayette															0.0	0.0
	Lake															0.0	0.0
	Levy															0.0	0.0
	Marion															0.0	0.0
	Putnam															0.0	0.0
	Sumter															0.0	0.0
	Suwannee															0.0	0.0
	Union															0.0	0.0
IV	Baker															0.0	0.0
	Clay															0.0	0.0
	Duval															0.0	0.0
	Flagler															0.0	0.0
	Nassau															0.0	0.0
	St. Johns															0.0	0.0
	Volusia		2	1											3	0.9	3.0
V	Pasco															0.0	0.0
	Pinellas															0.0	0.2
VI	Hardee															0.0	0.0
	Highlands															0.0	0.0
	Hillsborough															0.0	0.0
	Manatee	1													1	0.5	0.2
	Polk				1										1	0.3	0.0
VII	Brevard															0.0	0.4
	Orange															0.0	0.1
	Osceola															0.0	0.0
	Seminole		1												1	0.4	0.3
VIII	Charlotte															0.0	0.0
	Collier															0.0	2.5
	DeSoto											1			1	4.3	0.0
	Glades															0.0	0.0
	Hendry															0.0	0.0
	Lee															0.0	0.0
	Sarasota															0.0	0.0
IX	Indian River															0.0	0.0
	Martin															0.0	0.0
	Okeechobee															0.0	0.0
	Palm Beach								1						1	0.1	0.4
	St. Lucie															0.0	0.0
X	Broward															0.0	0.0
XI	Dade									1					1	0.1	0.1
	Monroe															0.0	0.0
STATE TOTAL		1	3	1	1	0	0	0	1	1	0	2	0	0	10	0.1	0.2

*1984-1986 Average rate

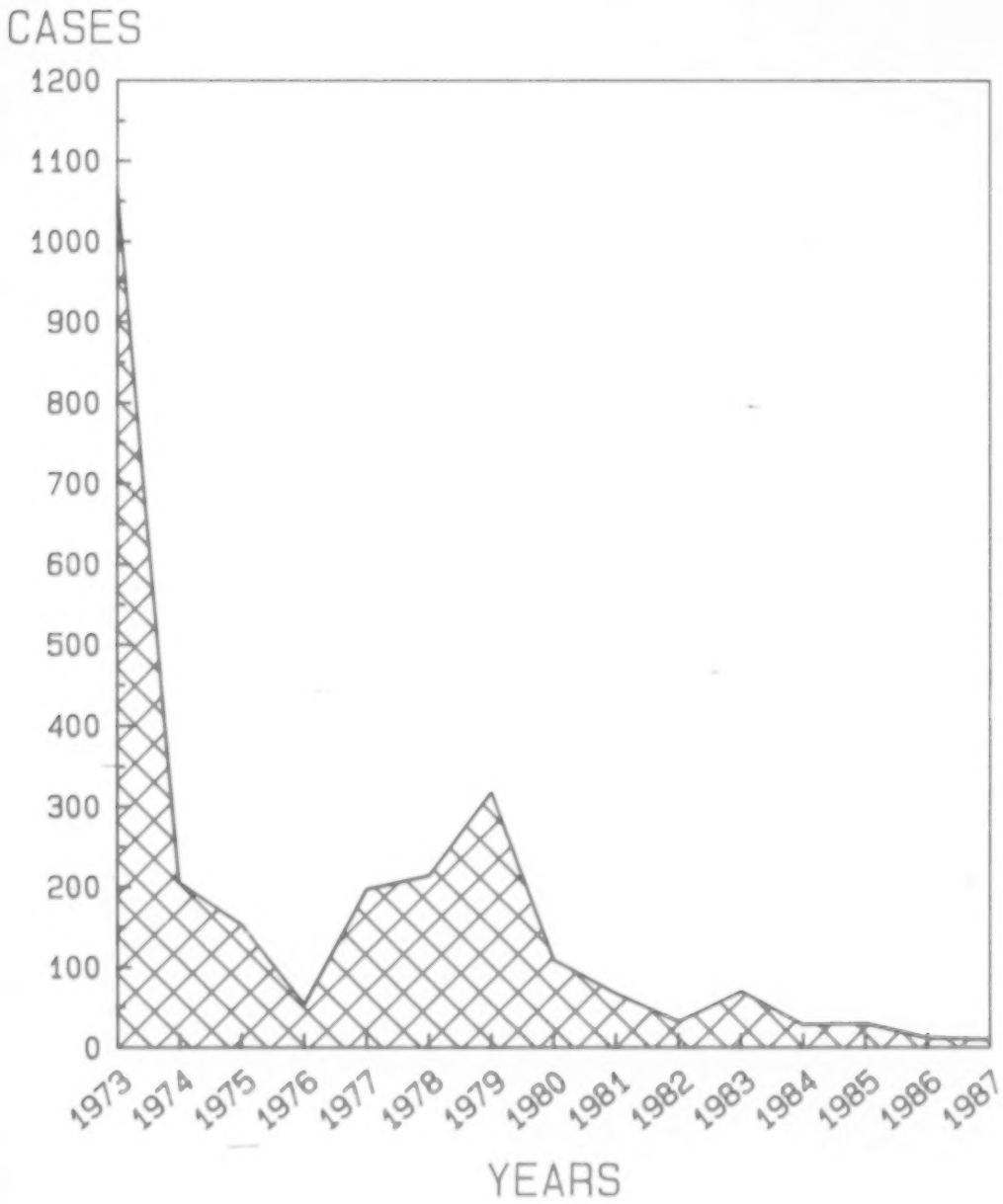
RUBELLA - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1987



RUBELLA - REPORTED INCIDENCE PER 100,000 POPULATION, BY AGE GROUP, FLORIDA, 1987



RUBELLA CASES REPORTED
FLORIDA, 1973-1987



SECTION 4:

Analysis of Animal Rabies & Zoonotic Diseases

ANIMAL RABIES

Of the 4,453 animal specimens examined for rabies in 1987, 111 (2.5%) were positive in flourescent rabies antibody (FRA) tests (Table 2). This represents a 39.3% decrease from the total number of cases (183) reported for 1986.

Rabies positive animals were identified in 36 counties compared to 40 counties in 1986 (Table 3). As in past years, cases have occurred throughout the state with the most being reported from the central and north central counties.

Cases of rabies in raccoons (71) accounted for about 64% of the total cases reported and 9.5% of those examined were positive in FRA tests. Cases in raccoons occurred throughout the state with outbreaks reported in central Florida (Polk, St. Lucie, Osceola, and Orange counties).

Cases of rabies in bats accounted for 19.8% of the total cases reported this year with 6.9% of all bats examined positive in FRA tests. Most of the reported cases of rabies in bats occurred in North Florida. Duval County experienced an outbreak of bat rabies between May and September. A similar outbreak occurred in this same area in 1983.

Reported cases in other wildlife and domestic animals comprised 16.2% of all cases. Cases in dogs (3/856) and cats (5/1,321) are still reflecting an increased number of positive cases since 1981.

TABLE 1

ANIMAL RABIES - Laboratory Confirmed Cases by Species, Florida, 1978-1987

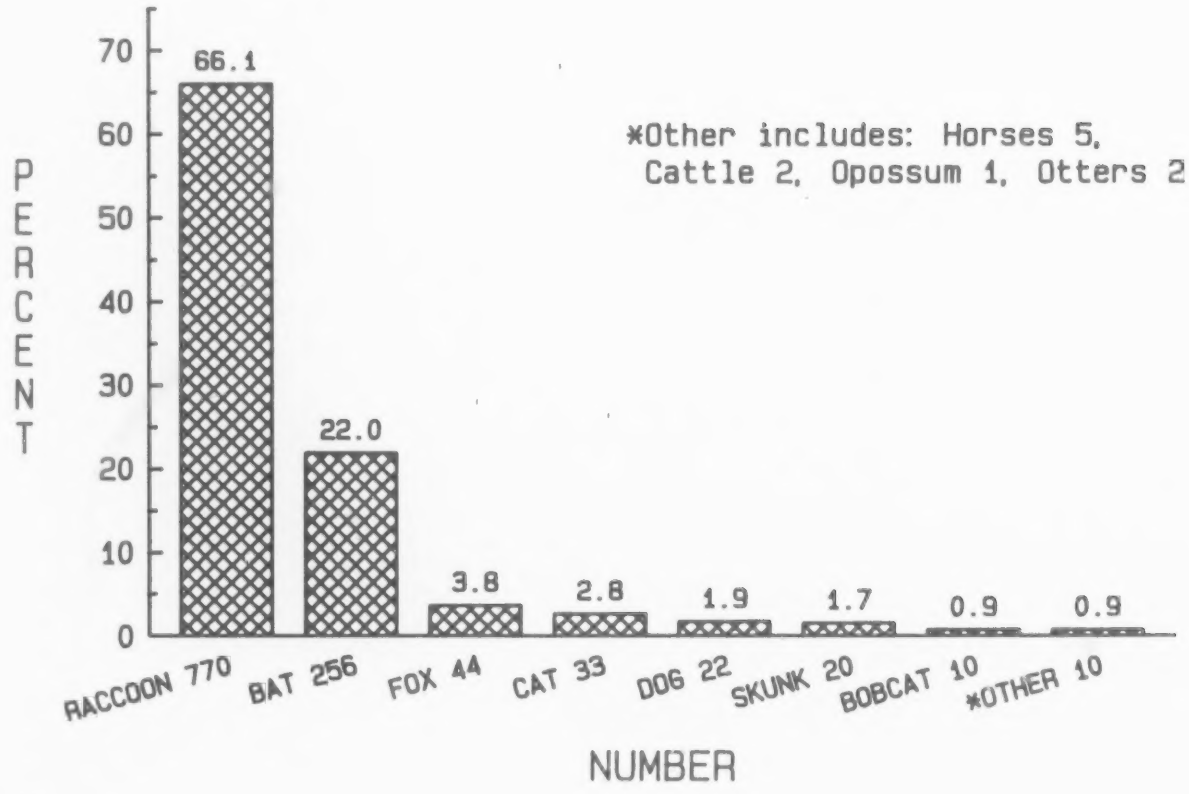
ANIMAL SPECIES	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
BAT	22	34	21	48	69	18	17	9	10	8
BOBCAT	0	0	3	2	1	0	0	2	0	2
CAT	5	7	1	1	2	1	7	3	5	1
CATTLE	0	0	0	0	1	0	0	1	0	0
DOG	3	4	2	1	1	2	1	4	3	1
FOX	8	5	6	3	0	6	7	3	5	1
HORSE	1	1	0	0	0	0	1	1	1	0
OPOSSUM	0	0	0	0	0	0	1	0	0	0
OTTER	0	1	0	1	0	0	0	0	0	0
RACCOON	71	128	122	92	56	51	79	84	54	33
SKUNK	1	3	4	1	1	2	3	3	1	1
STATE TOTAL	111	183	159	149	131	80	116	110	79	47

TABLE 2

ANIMAL RABIES - LABORATORY CONFIRMED CASES AND SPECIMENS EXAMINED, FLORIDA, 1987

Species	Number Examined	Number and Percent ( ) Positive	Percent of All Species Examined (N=4,453)	Percent of All Positive (N=111)
Dogs	856	3 (0.35)	19.22%	2.70%
Cats	1,321	5 (0.38)	29.67%	4.50%
	2,177	8 (0.37)	48.89%	7.21%
Raccoons	751	71 (9.45)	16.87%	63.96%
Bats	317	22 (6.94)	7.12%	19.82%
Skunks	78	1 (1.28)	1.75%	0.90%
	1,146	94 (8.20)	25.74%	84.68%
Fox	124	8 (6.45)	2.78%	7.21%
Bobcat	7	0 (0.00)	0.16%	0.00%
Other Wild	360	0 (0.00)	8.08%	0.00%
	491	8 (1.63)	11.03%	7.21%
Cattle	8	0 (0.00)	0.18%	0.00%
Horse	30	1 (3.33)	0.67%	0.90%
Other Domestic	22	0 (0.00)	0.49%	0.00%
	60	1 (1.67)	1.35%	0.90%
Rodents & Lagomorphs	579	0 (0.00)	13.00%	0.00%
TOTAL ALL SPECIES	4,453	111 (2.49)	100.00%	100.00%

ANIMAL RABIES
FLORIDA, 1978-1987
TOTAL 1, 165



*Other includes: Horses 5, Cattle 2, Opossum 1, Otters 2

TABLE 3

ANIMAL RABIES - Reported laboratory confirmed cases, by county, Florida, 1978-1987

COUNTY	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Alachua	6	6	2			2	4	9	5	2
Baker		1			2			1		
Bay	2	7	5	2	1	1	2		3	1
Bradford						1		2		
Brevard	1	1	5	3	5	1			2	
Broward				1			1			
Calhoun		1	1				1	2		
Charlotte	1	1	1						1	
Citrus	1			1	1	1				
Clay	8	4	1		5	1	1			
Collier		1					1		2	2
Columbia		1	3	2		3	4	4	2	1
Dade			1			1		1		1
DeSoto		2	1			1			1	
Dixie							1			
Duval	12	11	4	4	22	4	6	9	4	2
Escambia	3	14	2	7	19	2	1	1		
Flagler		2	1				3	1	1	
Franklin				1		1				
Gadsden	1	1	1	4	5	1	3	1	4	1
Gilchrist		1	1							
Glades			1							
Gulf		2	3	1						1
Hamilton	1	8	7		1	1	2	1	1	1
Hardee			4		3		2	2	3	
Hendry										
Hernando			2	1	1	2				
Highlands	2	2					1	2		
Hillsborough	1	4	5	1	3	1	3	2	5	6
Holmes	1	6	5	5	3		5	3	2	
Indian River	2				1					
Jackson	4	10	13	3	3	2	7	1	3	1
Jefferson	2	2	6	4	2		2	4	2	
Lafayette			1					4	1	
Lake	2	4			1	3	3	3	2	
Lee	3				1	2	7	2	3	
Leon	3	3	20	27	13	12		13	5	3
Levy		7	2			1			1	1
Liberty	1									
Madison	1	3	6	1		2	3	3		2
Manatee							2	1	2	1
Marion	3	6	2	1	6	1	7	4	5	
Martin				1	2					
Monroe										
Nassau	1					4		1	1	
Okaloosa	1	6	3	5	4	1	1	2	2	1
Okeechobee		2			1					
Orange	9	14	17	21	1	3	1	1	1	1
Osceola	6	3				2				2
Palm Beach						2	1	1		
Pasco	1		2		1	1				
Pinellas										
Polk	11	21	19	33	9	3	10	2		1
Putnam		1		1	1	2	3	2	1	
St. Johns	2	7		1	1	2	2			5
St. Lucie	12	1				2				
Santa Rosa	1	2		2	3	2				
Sarasota	1	4	1	1	3			5	2	5
Seminole	1	3	4	8	3	1	1	1	1	1
Sumter										
Suwannee	1	5	1				14	3	2	
Taylor						1	1	1		1
Union										
Volusia			1	1	1	3	7	7	3	
Wakulla				1				1	2	1
Walton	2	1	1	2	2	2	3	3	2	1
Washington	1	2	4	3	1	2	2	3	2	
STATE TOTAL	111	183	159	149	131	80	116	110	79	47

TABLE 4

ANIMAL RABIES - LABORATORY CONFIRMED CASES, BY COUNTY, BY SPECIES, BY MONTH OF REPORT, FLORIDA, 1987

County	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alachua	1 Rac			1 Rac	1 Rac	1 Horse					1 Cat	1 Cat	6
Baker													
Bay	1 Cat								1 Dog				2
Bradford													
Brevard								1 Rac					1
Broward													
Calhoun													
Charlotte			1 Cat										1
Citrus										1 Rac			1
Clay		1 Rac	1 Rac		2 Rac			3 Bat 1 Rac					8
Collier													
Columbia													
Dade													
DeSoto													
Dixie													
Duval	1 Rac			1 Rac	1 Bat	1 Bat	1 Fox	1 Skunk 3 Bat	2 Bat			1 Cat	12
Escambia				1 Bat				2 Bat					3
Flagler													
Franklin													
Gadsden						1 Rac							1
Gilchrist													
Glades													
Gulf													
Hamilton								1 Bat					1
Hardee													
Hendry													
Hernando													
Highlands										2 Rac			2
Hillsborough				1 Dog									1
Holmes		1 Rac											1
Indian River										1 Rac 1 Fox	1 Rac		2
Jackson			1 Rac							1 Rac		1 Rac	4
Jefferson	1 Rac									1 Rac			2
Lafayette													
Lake									1 Dog	1 Bat			2
Lee											3 Rac		3
Leon						1 Rac		1 Bat	1 Rac				3
Levy													
Liberty												1 Rac	1
Madison									1 Rac				1
Manatee													
Marion	1 Rac					1 Rac	1 Rac						3
Martin													
Monroe													
Nassau			1 Rac										1
Okaloosa										1 Bat			1
Okeechobee													
Orange			2 Rac	3 Rac	1 Rac	2 Rac				1 Rac			9
Osceola	1 Rac	1 Rac	1 Rac	1 Rac	1 Rac	1 Rac							6
Palm Beach													
Pasco				1 Rac									1
Pinellas													
Polk	3 Rac		1 Rac	2 Fox	1 Fox	1 Rac	1 Rac			1 Bat	1 Rac		11
Putnam													
St. Johns				1 Rac		1 Rac							2
St. Lucie								1 Rac	1 Bat 3 Rac	4 Rac		3 Rac	12
Santa Rosa										1 Fox			1
Sarasota										1 Bat			1
Seminole						1 Bat							1
Sumter													
Suwannee								1 Bat					1
Taylor													
Union													
Volusia													
Wakulla													
Walton							1 Fox 1 Rac						2
Washington											1 Fox		1
TOTAL	9	3	8	12	7	11	5	15	10	17	7	7	111

Brucellosis

Nine cases of brucellosis were reported in 1987 compared with a mean of 9.0 cases for the previous 5 years (1982-1986). All cases had onset between March and October. All cases occurred in either the central part of North Florida (Alachua, Levy, Suwannee and Union counties) or south Florida (Sarasota, Dade, DeSoto, and Charlotte counties). Eight were male and 1 female. Two were 20-29 years of age, 2 were 30-39, 1 was 40-49 and 4 were 50-59. The probable source of exposure was documented in all 9 cases. Five of these were in individuals that handled or ate the meat of wild hogs. Two had occupations associated with cutting or packing meat. One had contact with cows, and one drank goat's milk from Peru.

Leptospirosis

No cases of leptospirosis was reported in 1987 compared with a mean of 3.8 cases for the previous 5 years (1982-1986).

Psittacosis

Two cases of psittacosis were reported in 1987 compared to a mean of 4.8 cases for the previous 5 years (1982-1986). One case had onset in April and the other in September. They occurred in Osceola and Dade counties. One was a 43 year old male and the other a 76 year old female. Both cases had contact with psittacine birds in a residential setting.

Rocky Mountain Spotted Fever

Four cases of rocky mountain spotted fever were reported during 1987 as compared with a mean of 5.4 cases reported during the previous 5 years (1982-1986). Two were white males from Collier and Indian River counties and two were white females from Palm Beach and Okeechobee counties. One was 10 to 19 years of age, one was 20 to 29 years of age, another was 40 to 49, and one was 70 to 79 years of age. Onset occurred between July and December. Three had known exposure to ticks prior to onset.

ZOONOTIC DISEASES - Reported cases, by disease, by county, Florida, 1987

	BRUCELLOSIS	LEPTOSPIROSIS	PSITTACOSIS	ROCKY MOUNTAIN SPOTTED FEVER
Alachua	1			
Baker				
Bay				
Bradford				
Brevard				
Broward				
Calhoun				
Charlotte	1			
Citrus				
Clay				
Collier	1			1
Columbia				
Dade	1		1	
DeSoto	1			
Dixie				
Duval				
Escambia				
Flagler				
Franklin				
Gadsden				
Gilchrist				
Glades				
Gulf				
Hamilton				
Hardee				
Hendry				
Hernando				
Highlands				
Hillsborough				
Holmes				
Indian River				1
Jackson				
Jefferson				
Lafayette				
Lake				
Lee				
Leon				
Levy	1			
Liberty				
Madison				
Manatee				
Marion				
Martin				
Monroe				
Nassau				
Okaloosa				
Okeechobee				1
Orange				
Osceola			1	
Palm Beach				1
Pasco				
Pinellas				
Polk				
Putnam				
St. Johns				
St. Lucie				
Santa Rosa				
Sarasota	1			
Seminole				
Sumter				
Suwannee	1			
Taylor				
Union	1			
Volusia				
Wakulla				
Walton				
Washington				
STATE TOTAL	9	0	2	4

SECTION 5:

SUMMARY OF ACQUIRED IMMUNE DEFICIENCY SYNDROME

AIDS

Introduction

By 1987, the Florida AIDS Program was firmly established and AIDS activities were greatly expanded with increases in funding, personnel, and services. The number of cases diagnosed in 1987 increased by a factor of 1.5 over the previous year. On September 1, 1987, the Centers for Disease Control instituted a revision of the case definition for reporting purposes. The definition was expanded to include presumptively (on clinical grounds) diagnosed AIDS cases, as well as new diseases indicative of AIDS. This change resulted in almost 400 new cases for Florida from October to November, 1987. Some of these cases were previously reported but had not met the 1985 definition, and some were newly reported on presumptive grounds. Demographic, disease, and risk group breakdowns of the 1987 data were again similar to previous years.

Morbidity

As of December 31, 1987 a total of 4,427 cases of AIDS were reported to the Florida Department of Health and Rehabilitative Services with onset of illness occurring from 1980 through 1987. Of these, 6 cases were diagnosed in 1980, 17 cases were diagnosed in 1981, 82 in 1982, 211 in 1983, 415 in 1984, 766 in 1985, 1,170 in 1986, and 1,760 in 1987.

Age, Race, and Sex

The distribution of AIDS cases in Florida by age group is shown in Table 1. For those diagnosed in 1987, the greatest number of cases occurred in the 30-39 year age group (44%), followed by those 40-49 years of age (19%), and those aged 25-29 years (17%). Thirty-five pediatric cases (<13 years of age) were diagnosed during this time period. Of these, 16 (46%) were under the age of one.

Of the total adult cases (1,725) diagnosed in 1987, 1,531 (89%) were male, and 194 (11%) were female. For all cases diagnosed in 1987, 926 (53%) were white, 643 (37%) were black, 187 (11%) were Hispanic, and 4 were other race or unknown (Table 2).

Risk Category

Data by risk category for the cases diagnosed in 1987 are shown in Table 3. The greatest proportion of adult cases were identified as homosexual or bisexual men (53%), followed by intravenous drug users (19%). Heterosexual contact was the next most frequent mode of transmission, accounting for 207 (12%) of the adult cases reported. Among the 35 pediatric cases, most (83%) had a parent with AIDS or at risk for AIDS and 2 (6%) acquired the disease through infected blood or blood products.

Disease Group and Mortality

In 1987, the greatest proportion of cases were diagnosed with Pneumocystis carinii pneumonia (PCP), accounting for 55% of the total. The second most common opportunistic disease was Kaposi's Sarcoma (KS), which accounted for 6%. The remainder (39%) were diagnosed with other opportunistic diseases without PCP (Table 4). Approximately one half (49%) of the 1987 cases are reported to have died.

Geographic Distribution

Dade County accounted for the majority of cases diagnosed in 1987 with a total of 495 (28%), followed by the counties of Broward and Palm Beach which reported 296 (17%) and 213 (12%), respectively. A total of 47 counties throughout the state had at least one case of diagnosed AIDS during this time period (Table 5), however, the majority (60%) were residents of South Florida at onset of illness (Districts IX, X, or XI). Incidence per 100,000 population is also shown for each county reporting AIDS cases. Monroe County reported the highest incidence with 52 cases per 100,000.

TABLE 1

Reported AIDS cases by age group, Florida, 1987

Age	Number (%)
< 1	16 (1)
1 - 4	12 (1)
5 - 9	6 (0)
10 - 14	2 (0)
15 - 19	4 (0)
20 - 24	94 (5)
25 - 29	304 (17)
30 - 39	779 (44)
40 - 49	340 (19)
50 - 59	123 (7)
60+	80 (5)
TOTAL	1760 (100)

TABLE 2

Reported AIDS cases by race/ethnicity, Florida, 1987

Race/Ethnicity	Adult/ Adolescent Cases (%)	Pediatric Cases (%)	Total Cases (%)
White, Not Hispanic	922 (53)	4 (11)	926 (53)
Black, Not Hispanic	614 (36)	29 (83)	643 (37)
Hispanic	185 (11)	2 (6)	187 (11)
Other	1 (0)	0 (0)	1 (0)
Unknown	3 (0)	0 (0)	3 (0)
TOTAL	1725 (100)	35 (100)	1760 (100)

TABLE 3

Reported AIDS cases by patient group, Florida, 1987

Patient Groups	Adult/Adolescent		
	Males (%)	Females (%)	Total (%)
Homosexual or Bisexual Men	908 (59)	0 (0)	908 (53)
Intravenous (IV) Drug User	240 (16)	87 (45)	327 (19)
Homo/Bi IV Drug User	102 (7)	0 (0)	102 (6)
Hemophiliac	9 (1)	0 (0)	9 (1)
Heterosexual contact	133 (9)	74 (38)	207 (12)
Transfusion with blood/products	46 (3)	21 (11)	67 (4)
None of the Above / Other	93 (6)	12 (6)	105 (6)
Total	1531 (100)	194 (100)	1725 (100)

Patient Groups	Pediatric		
	Males (%)	Females (%)	Total (%)
Hemophiliac	1 (5)	0 (0)	1 (3)
Parent at risk/has AIDS/HIV	17 (89)	12 (75)	29 (83)
Transfusion with blood/products	0 (0)	1 (6)	1 (3)
None of the Above / Other	1 (5)	3 (19)	4 (11)
Total	19 (100)	16 (100)	35 (100)

TABLE 4

Reported AIDS cases by disease category, Florida, 1987

Disease Category	Adult/Adolescent		Pediatric	
	Cases (%)	Deaths (%)	Cases (%)	Deaths (%)
PCP	947 (55)	464 (49)	17 (49)	9 (53)
Other Disease (non PCP)	664 (38)	352 (53)	18 (51)	6 (33)
KS Alone	114 (7)	40 (35)	0 (0)	0 (0)
Total	1725 (100)	856 (50)	35 (100)	15 (43)

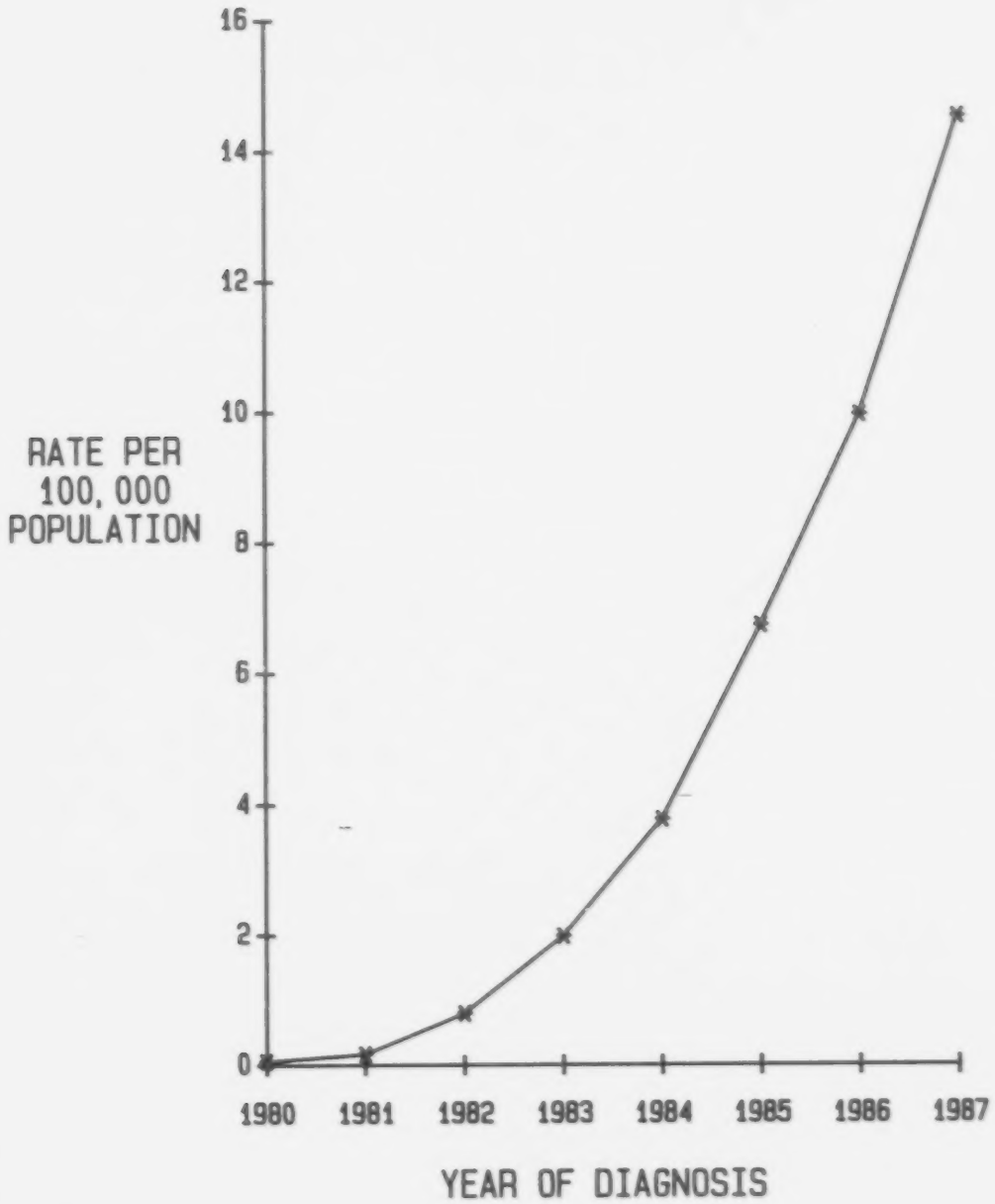
Disease Category	Total	
	Cases (%)	Deaths (%)
PCP	964 (55)	473 (49)
Other Disease (non PCP)	682 (39)	358 (52)
KS Alone	114 (6)	40 (35)
Total	1760 (100)	871 (49)

TABLE 5

Reported AIDS cases by County of Residence at Onset of Illness, Florida, 1987

District	County	Number Reported	Percent of Total	Rate Per 100,000
I	Escambia	16	(0.91)	5.65
	Okaloosa	4	(0.23)	2.65
	Walton	1	(0.06)	3.60
II	Bay	8	(0.45)	6.04
	Franklin	1	(0.06)	11.49
	Gadsden	1	(0.06)	2.13
	Gulf	1	(0.06)	8.41
	Leon	13	(0.74)	7.30
	Taylor	1	(0.06)	5.36
	Wakulla	1	(0.06)	6.95
	Washington	1	(0.06)	6.45
III	Alachua	14	(0.80)	7.69
	Citrus	3	(0.17)	3.65
	Columbia	2	(0.11)	4.80
	Lake	5	(0.28)	3.66
	Marion	5	(0.28)	2.82
	Union	2	(0.11)	18.21
IV	Baker	3	(0.17)	16.29
	Clay	2	(0.11)	2.10
	Duval	88	(5.00)	13.16
	Flagler	1	(0.06)	5.29
	St. Johns	7	(0.40)	8.93
	Volusia	20	(1.14)	5.99
V	Pasco	14	(0.80)	5.45
	Pinellas	79	(4.49)	9.42
VI	Highlands	4	(0.23)	6.35
	Hillsborough	167	(9.49)	20.62
	Manatee	6	(0.34)	3.29
	Polk	14	(0.80)	3.57
VII	Brevard	15	(0.85)	3.98
	Orange	61	(3.47)	10.06
	Osceola	4	(0.23)	4.44
	Seminole	11	(0.63)	4.28
VIII	Charlotte	1	(0.06)	1.13
	Collier	10	(0.57)	7.80
	DeSoto	2	(0.11)	8.68
	Glades	1	(0.06)	13.54
	Hendry	3	(0.17)	12.28
	Lee	56	(3.18)	19.03
	Sarasota	18	(1.02)	7.06
IX	Indian River	2	(0.11)	2.37
	Martin	2	(0.11)	2.27
	Palm Beach	213	(12.10)	26.91
	St. Lucie	8	(0.45)	6.22
X	Broward	296	(16.82)	25.07
XI	Dade	495	(28.13)	27.53
	Monroe	39	(2.22)	52.08
Department of Corrections		37	(2.10)	------
Unknown County		2	(0.11)	------
	TOTAL	1760	(100.0)	14.53

AIDS
REPORTED CASE RATES
FLORIDA, 1980-1987



SECTION 6:

SUMMARY OF SEXUALLY TRANSMITTED DISEASES

Prepared by Sexually Transmitted Disease Program
Jack E. Wroten, Program Supervisor

SYPHILIS

Morbidity Trends

In 1987, 15,666 reports of syphilis represented a dramatic 6,239 case or 66.2% increase over the 9,427 cases reported in 1986. In just two years, total reported syphilis has risen 96.6%, nearly double the 1985 case level. Florida syphilis levels for 1987 are the highest in nearly 30 years with an incidence of 129.3 per 100,000 population. Florida also ranks first in the nation for reported cases of infectious syphilis, accounting for more than one fifth (21.2%) of the nation's cases. Since 1986 significant increases have occured for all stages of syphilis (66.2% overall); primary and secondary (71.3%); early latent (68.1%); and late and late latent (54.2%).

Despite a rise in population of 735,482 between 1985 and 1987, the rate per 100,000 for all stages of syphilis jumped from 70.0 to 129.3 (see chart below).

Year	Population	Total Syphilis		Primary & Secondary		Early Latent		Late & Late Latent		Congenital	
		CASES	RATES	CASES	RATES	CASES	RATES	CASES	RATES	CASES	RATES
1987	12,112,800	15666	129.3	7440	61.4	5224	43.1	2892	23.9	110	0.9
1986	11,744,900	9427	80.3	4344	37.6	3107	26.9	1876	16.2	100	0.9
1985	11,377,318	7969	70.0	3679	32.3	2504	22.0	1755	15.4	31	0.27
1984	11,015,061	8314	75.5	3876	35.2	2812	25.5	1596	14.5	30	0.27
1983	10,645,793	8404	79.0	4179	39.3	2501	23.5	1699	16.0	25	0.24
1982	10,555,498	7936	75.2	4149	39.3	1884	17.9	1895	18.0	8	0.08
1981	10,108,564	5971	59.1	3036	30.3	1376	13.6	1552	15.4	7	0.07
1980	9,813,706	4384	44.7	2257	23.0	1066	10.9	1058	10.8	3	0.03

Primary and secondary (P&S) syphilis is the early infectious stage of the disease. In 1987, 7,440 cases of P&S syphilis were reported. This amounts to nearly 50% of all syphilis reported and an incidence of 61.4 per 100,000 population. The majority (57.3%) of the 7,440 cases of P&S syphilis were reported in persons 15-29 years old. Those 15-19 accounted for 10.8% (802 cases), those 20-24, 23.0% (1,714 cases), and those 25-29, 23.5% (1,747 cases).

Additional analysis of the data indicates that males account for 4,714 (63.4%) of the P&S syphilis reports for a male to female ratio of 1:1.7. The racial distribution of all reported syphilis cases indicates that 80.5% of the cases occur in blacks, 11.1% among whites, and 8.1% of the cases are hispanic. P&S syphilis cases depict a similar pattern where 82.2% of the cases are black, 11.4% are white and 6.5% are hispanic. Furthermore, black males comprise 49.4% of infectious cases and black females represent 32.8% of the infectious cases. White males, however, only accounted for 7.0% and only 4.4% of white females were reported with infectious disease. Closer analysis of the cases reported in 1987 shows that only 544 (7.3%) of the infectious cases were reported by private health care providers.

Since 1983, Florida has experienced sharp increases in the number of reported cases of congenital syphilis. Between 1982 and 1983, the number of reported cases of congenital syphilis tripled (8 cases in 1982 versus 25 cases in 1983). Thirty cases were reported in 1984, 31 cases in 1985, and 100 cases in 1986. The case rates for congenital syphilis for Florida and the U.S. have also risen dramatically since 1983 (see table below).

CONGENITAL SYPHILIS
CASE RATES PER 100,000 LIVE BIRTHS

	1980	1981	1982	1983	1984	1985	1986	1987
UNITED STATES	3.0	4.4	4.3	4.3	6.7	7.1	9.8	11.8
FLORIDA	2.3	5.1	5.5	16.8	19.3	18.9	59.9	65.6

In 1987, Florida reported one quarter of all the cases of congenital syphilis in the United States. Florida reported 110 cases for 1987 compared to 100 cases for 1986 (10.0% increase). These 110 cases include 41 occurrences of fetal/infant demise. A review of the 110 cases reported reveals that 56.4% (62) of the cases were reported from Dade and Broward counties. Ninety percent of the cases were black and almost three quarters (71.8%) of the mothers received no prenatal care prior to delivery. With proper prenatal care many of these cases could have been prevented.

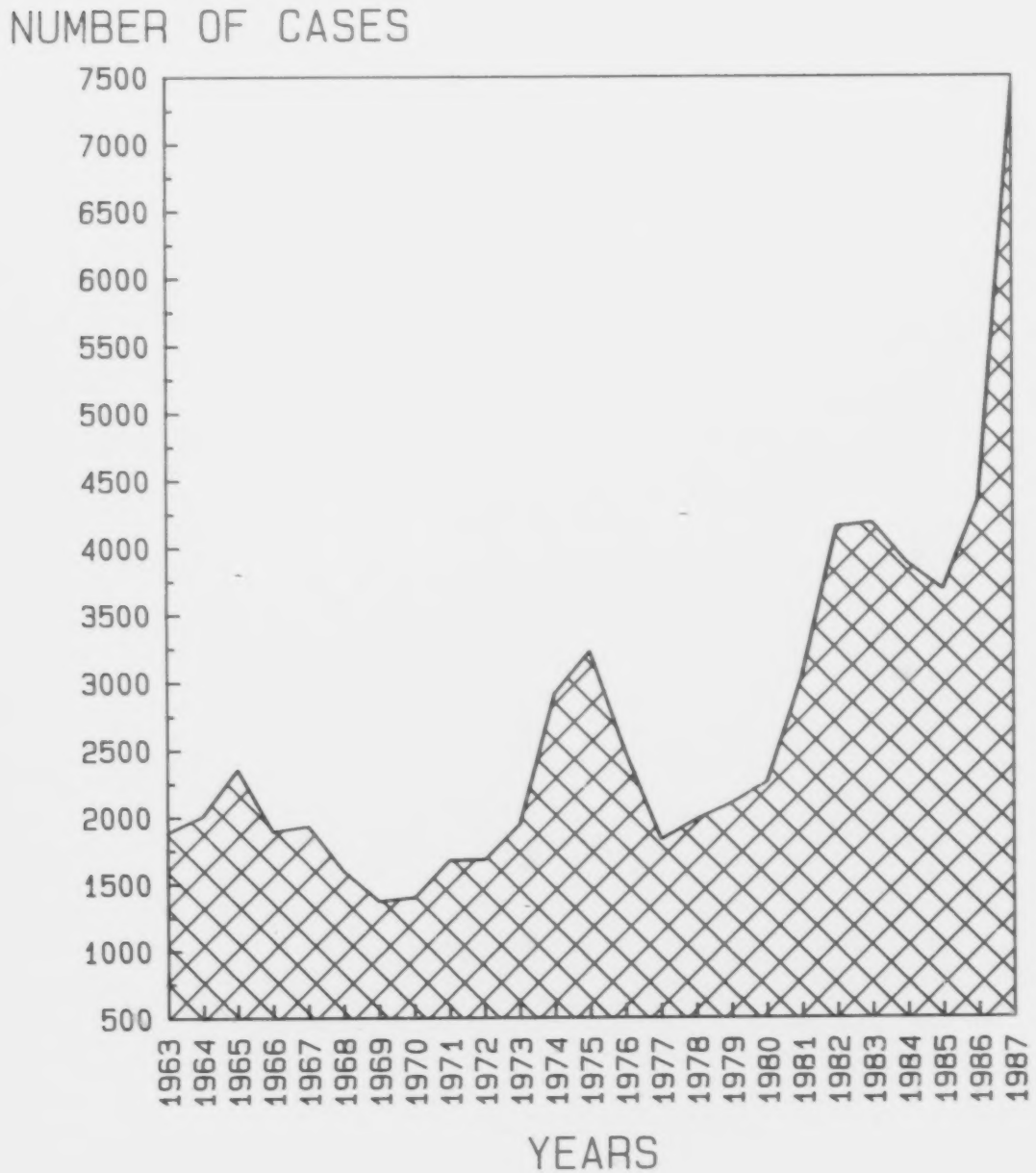
Primary & Secondary SYPHILIS - Reported Cases By County,
Florida, 1987 vs. 1986

	1987	1986	%CHANGE
District I			
Escambia	34	87	-60.9
Okaloosa	5	5	0.0
Santa Rosa	2	1	+100.0
Walton	1	0	***
District II			
Bay	12	7	+71.4
Calhoun	1	0	***
Franklin	1	0	***
Gadsden	72	34	+111.8
Gulf	0	0	***
Holmes	0	0	***
Jackson	5	3	+66.7
Jefferson	1	1	0.0
Leon	242	47	+414.9
Liberty	0	0	***
Madison	8	3	+414.9
Taylor	9	12	-25.0
Wakulla	4	0	***
Washington	9	2	+350.0
District III			
Alachua	96	84	+14.3
Bradford	10	3	+233.3
Citrus	1	0	***
Columbia	10	16	-37.5
Dixie	0	2	-100.0
Gilchrist	1	0	***
Hamilton	3	5	-40.0
Hernando	4	1	+300.0
Lafayette	2	1	0.0
Lake	28	11	+154.5
Levy	4	7	-42.9
Marion	26	14	+85.7
Putnam	35	22	+59.1
Sumter	7	1	+600.0
Suwannee	0	6	-100.0
Union	2	0	***
District IV			
Baker	3	2	+50.0
Clay	4	0	*
Duval	275	240	+14.6
Flagler	2	2	0.0
Nassau	3	1	+200.0
St. Johns	24	10	+140.0
Volusia	110	72	+52.8

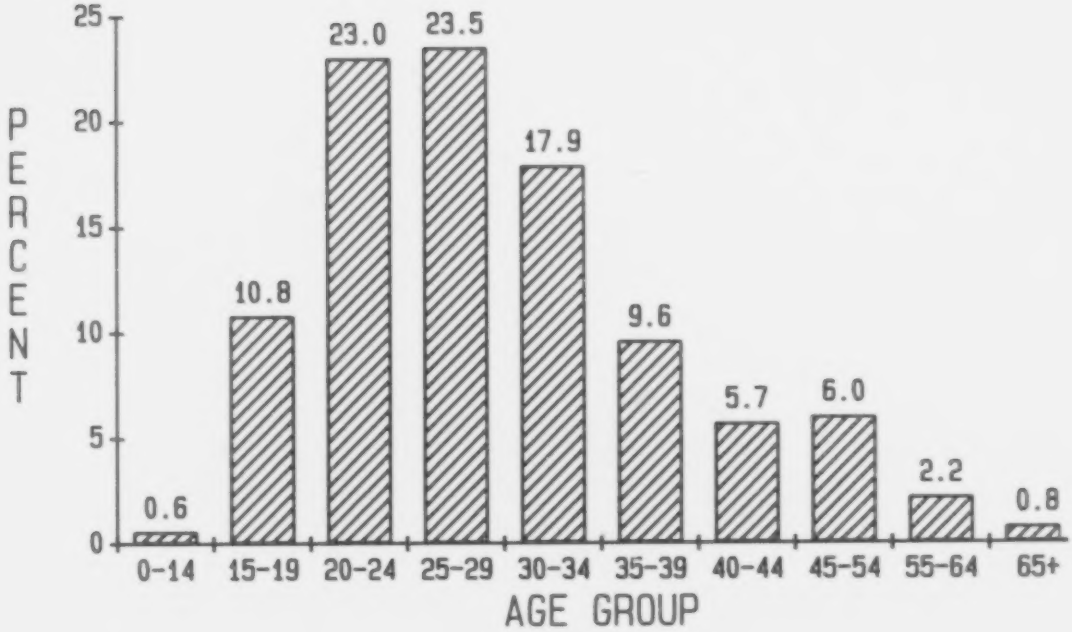
	1987	1986	%CHANGE
District V			
Pasco	10	6	+66.7
Pinellas	270	130	+107.7
District VI			
Hardee	3	1	+200.0
Highlands	25	9	+177.8
Hillsborough	608	157	+287.3
Manatee	94	43	+118.6
Polk	208	49	+324.5
District VII			
Brevard	119	80	+48.8
Orange	510	364	+40.1
Osceola	20	12	+66.7
Seminole	62	29	+113.8
District VIII			
Charlotte	7	0	***
Collier	68	32	+112.5
DeSoto	10	4	+150.0
Glades	1	0	***
Hendry	27	3	+800.0
Lee	174	97	+79.4
Sarasota	41	15	+173.3
District IX			
Indian River	36	11	+227.3
Martin	19	12	+58.3
Okeechobee	12	14	-14.3
Palm Beach	842	429	+96.3
St. Lucie	161	74	+117.6
District X			
Broward	1241	821	+51.2
District XI			
Dade	1723	1209	+42.5
Monroe	21	12	+75.0
Institutions	72	28	+157.1
STATE TOTAL	7440	4344	+71.3

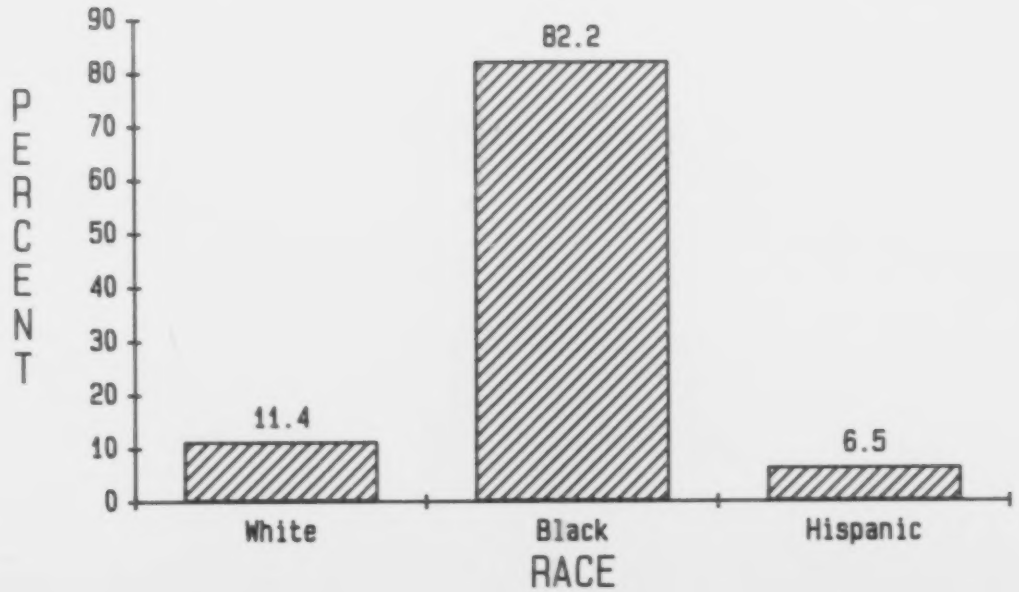
***Percent calculation cannot be made. No prior period morbidity was reported.

PRIMARY & SECONDARY SYPHILIS REPORTED CASES, FLORIDA, 1963-1987

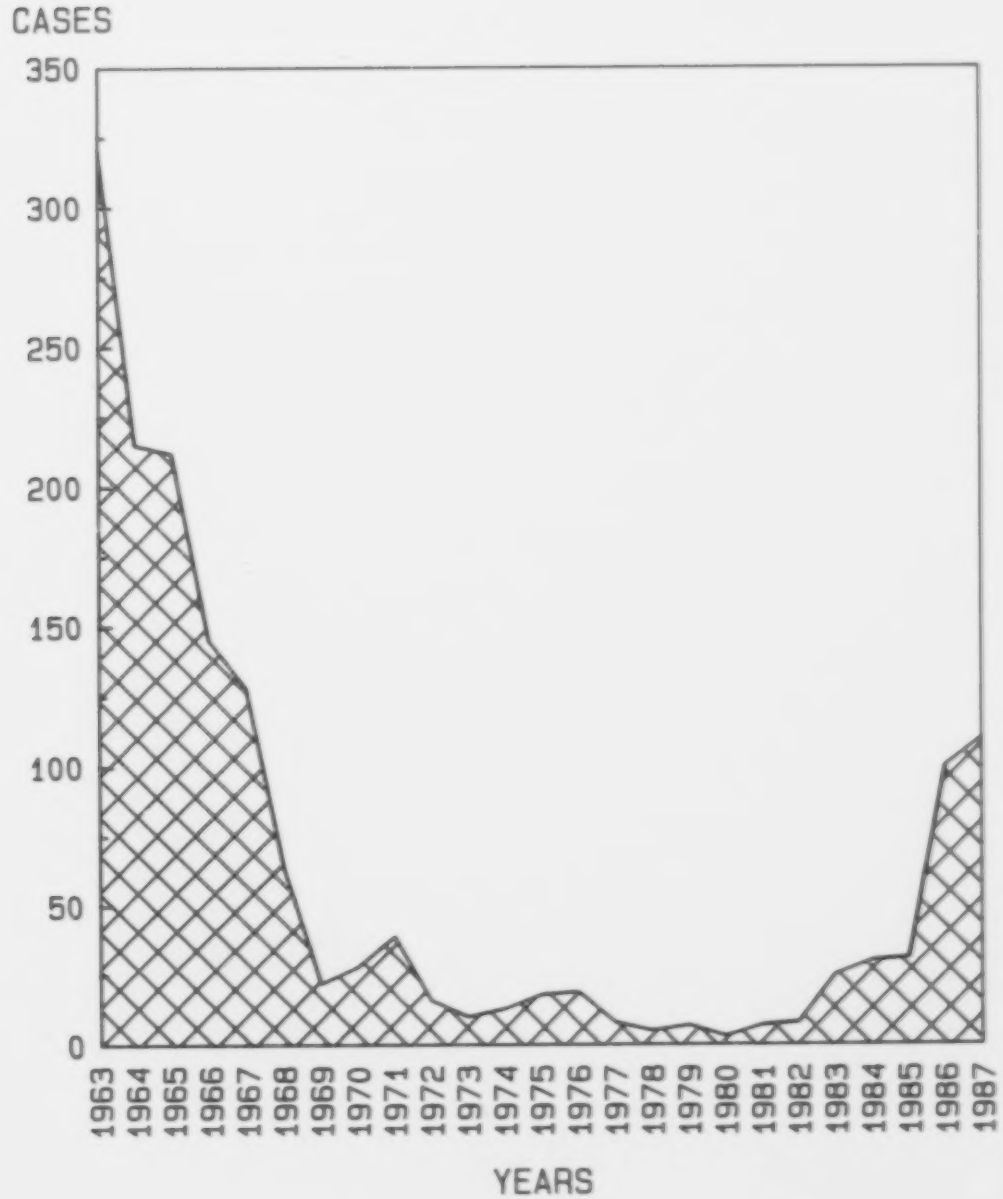


PRIMARY & SECONDARY SYPHILIS
PERCENT OF REPORTED CASES BY AGE & RACE
FLORIDA, 1987





CONGENITAL SYPHILIS, REPORTED CASES, FLORIDA, 1963-1987



GONORRHEA

Morbidity Trends

In 1987, 62,944 reports of gonorrhea represented a 6.7% decrease over the 67,443 cases reported in 1986. The gonorrhea incidence, however, remains exceptionally high at 519.6 per 100,000 population compared to the national average of 323.1 per 100,000 and the 1990 objective of 280 per 100,000 population. Gonorrhea cases in Florida have consistantly remained above the 60,000 case level over the past ten years, excluding a short decline from 1983-85. Cases reported during the last decade have ranged from a high of 67,443 last year (1986) to a low of 51,212 in 1984. The encouraging aspect of the gonorrhea trend is that the incidence per 100,000 population is generally in decline. This is due in part to vigorous population growth, which has increased on average 311,460 per year for the past five years. The 1987 incidence (519.6) is a decrease of 55.1 from the 1986 incidence of 574.7 per 100,000 population. The screening program to detect asymptomatic females has also had an impact on the gonorrhea case rate trend.

The majority of the gonorrhea cases were reported in persons 15-19 years old. Those 15-19 accounted for 22.8% (14,322 cases); those 20-24, 30.5% (19,173 cases); and those 25-29, 20.6% (12,987 cases). Closer analysis shows that only 14,510 (23.1%) of the gonorrhea cases were reported by private health care providers. Additionally, males accounted for 37,987 (60.4%) of the reported cases. The racial distribution shows that 77.3% of the cases occur among non-white persons, and 22.7% among white persons.

In summary, the typical infected person is male, between 20 and 29 years of age (49.8% of total males), non-white (79.7% of total males), heterosexual, and resides in the intercity neighborhoods, where morbidity is highest.

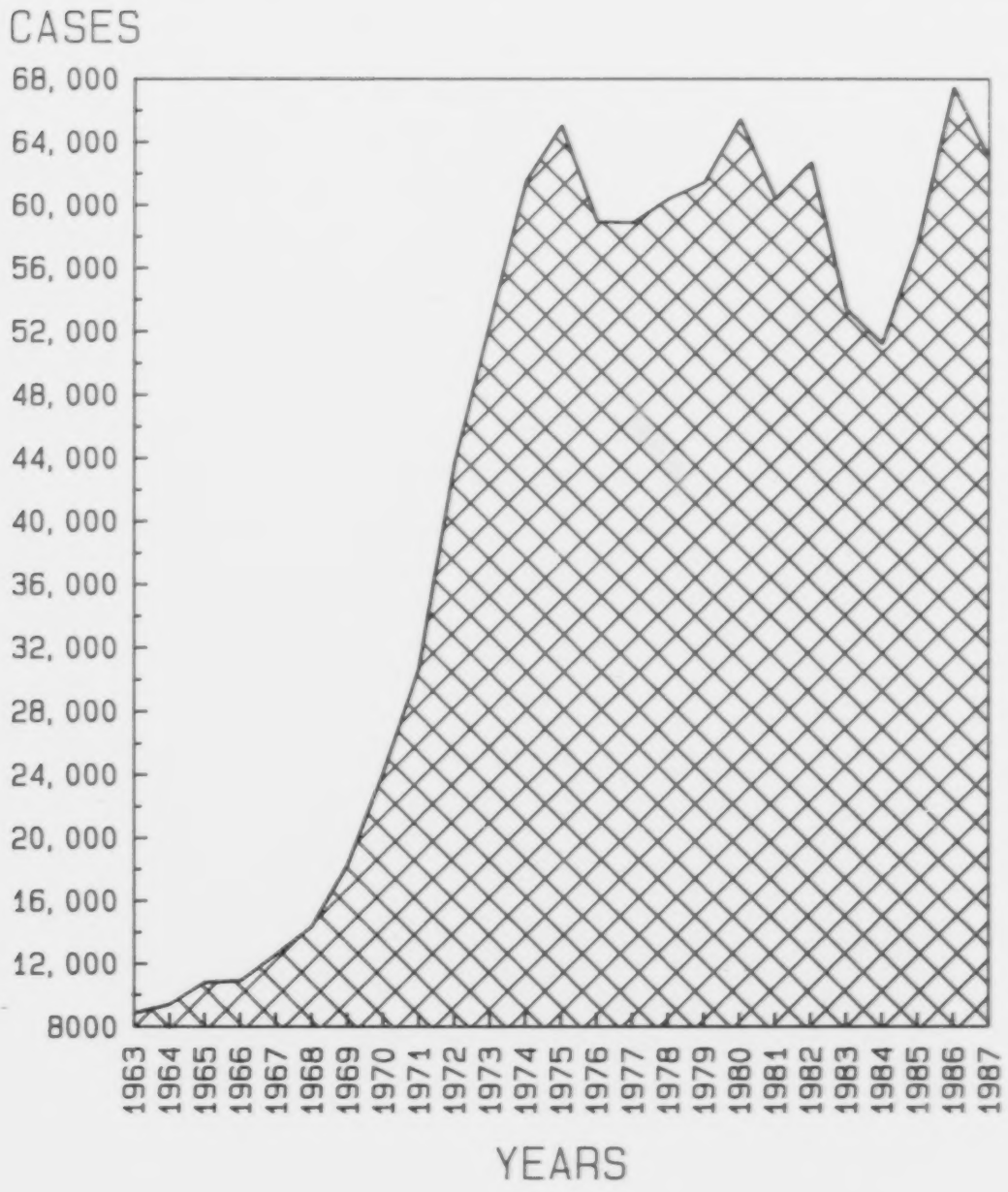
Reported cases of penicillinase-producing Neisseria gonorrhoeae (PPNG) for 1987 depicted a surprising decrease. There were 4,909 reported cases during 1987 compared to 5,629 reported cases in 1986, representing a 12.8% decrease. Florida has been actively involved in the battle to reduce the incidence of PPNG since 1976. The 1987 morbidity represents the only decrease in PPNG since Florida's efforts began over 10 years ago. Florida, however, still reported 19.5% of the nation's antibiotic-resistant gonorrhea. PPNG as a percent of gonorrhea in Florida is 7.8%, well above the national average of 3.2%. The top three counties with PPNG infection for 1987 are Dade (1,696 cases), Broward (984 cases) and Hillsborough (310 cases). Together these counties represent 61% of the PPNG in Florida.

In 1987, 24,957 women were reported with gonorrhea in Florida, and 6.3% were found to have gonococcal pelvic inflammatory disease (GPID). Specifically, there were 1,580 cases reported in 1987 versus 2,473 cases reported in 1986. This represents a decrease of 36.1%. Priorities continue to be maintained in detecting young females diagnosed with GPID and identifying sex contacts for referral, examination and treatment.

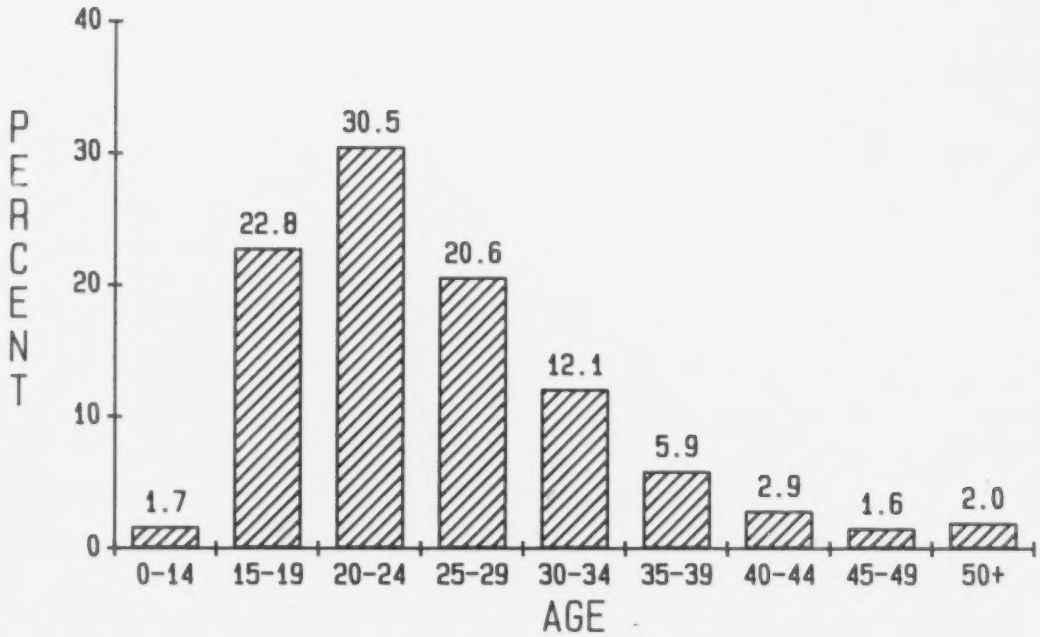
GONORRHEA - Reported Cases By County,
Florida, 1987 vs. 1986

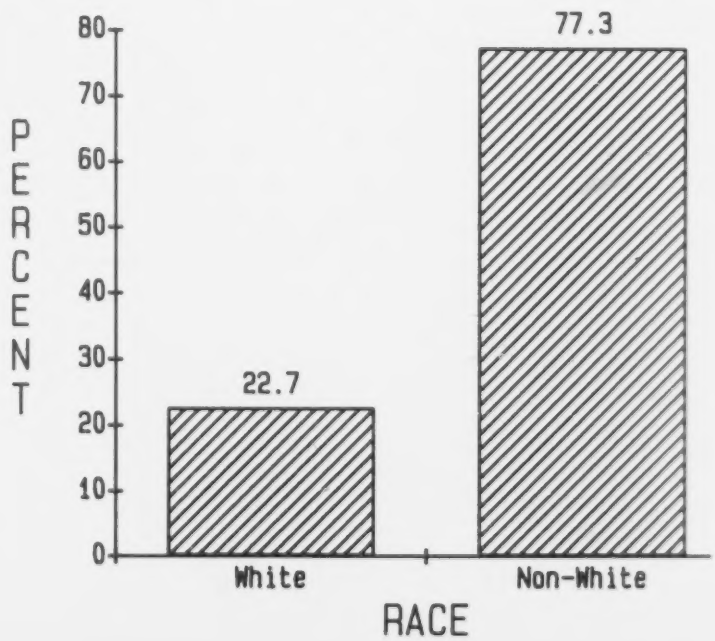
	1987	1986	%CHANGE
District I			
Escambia	1429	1707	-16.3
Okaloosa	277	226	+22.6
Santa Rosa	59	90	-34.4
Walton	16	19	-15.8
District II			
Bay	434	429	+1.2
Calhoun	37	37	0.0
Franklin	9	11	-18.2
Gadsden	476	536	-11.2
Gulf	22	31	-29.0
Holmes	10	25	-60.0
Jackson	88	70	+25.7
Jefferson	81	111	-27.0
Leon	2145	2195	-2.3
Liberty	7	13	-46.2
Madison	127	129	-1.6
Taylor	78	111	-29.7
Wakulla	31	21	+47.6
Washington	38	39	-2.6
District III			
Alachua	1624	1269	+28.0
Bradford	27	93	-71.0
Citrus	143	102	+40.2
Columbia	190	309	-38.5
Dixie	20	43	-53.5
Gilchrist	8	4	+100.0
Hamilton	40	119	-66.4
Hernando	97	123	-21.1
Lafayette	8	2	+300.0
Lake	466	525	-11.2
Levy	33	41	-19.5
Marion	1008	864	+16.7
Putnam	287	221	+29.9
Sumter	121	163	-25.8
Suwannee	58	86	-32.6
Union	8	24	-66.7
District IV			
Baker	44	27	+63.0
Clay	212	174	+21.8
Duval	6709	6372	+5.3
Flagler	45	55	-18.2
Nassau	100	131	-23.7
St. Johns	199	212	-6.1
Volusia	1158	1022	+13.3
District V			
Pasco	285	308	-7.5
Pinellas	4122	4128	-0.1
District VI			
Hardee	72	44	+63.6
Highlands	196	322	-39.1
Hillsborough	5484	6203	-11.6
Manatee	1252	1546	-19.0
Polk	2536	2759	-8.1
District VII			
Brevard	889	1198	-25.8
Orange	4087	5018	-18.6
Osceola	146	218	-33.0
Seminole	751	886	-15.2
District VIII			
Charlotte	88	69	+27.5
Collier	631	566	+11.5
DeSoto	136	109	+24.8
Glades	13	11	+18.2
Hendry	68	52	+30.8
Lee	1856	1524	+21.8
Sarasota	619	847	-26.9
District IX			
Indian River	444	598	-25.8
Martin	249	281	-11.4
Okeechobee	105	50	+110.0
Palm Beach	3791	4007	-5.4
St. Lucie	931	1102	-15.5
District X			
Broward	5875	5492	+7.0
District XI			
Dade	9926	11993	-17.2
Monroe	169	185	-8.6
Institutions	254	146	+74.0
STATE TOTAL	62944	67443	-6.7

GONORRHEA-CASES REPORTED
FLORIDA, 1963-1987

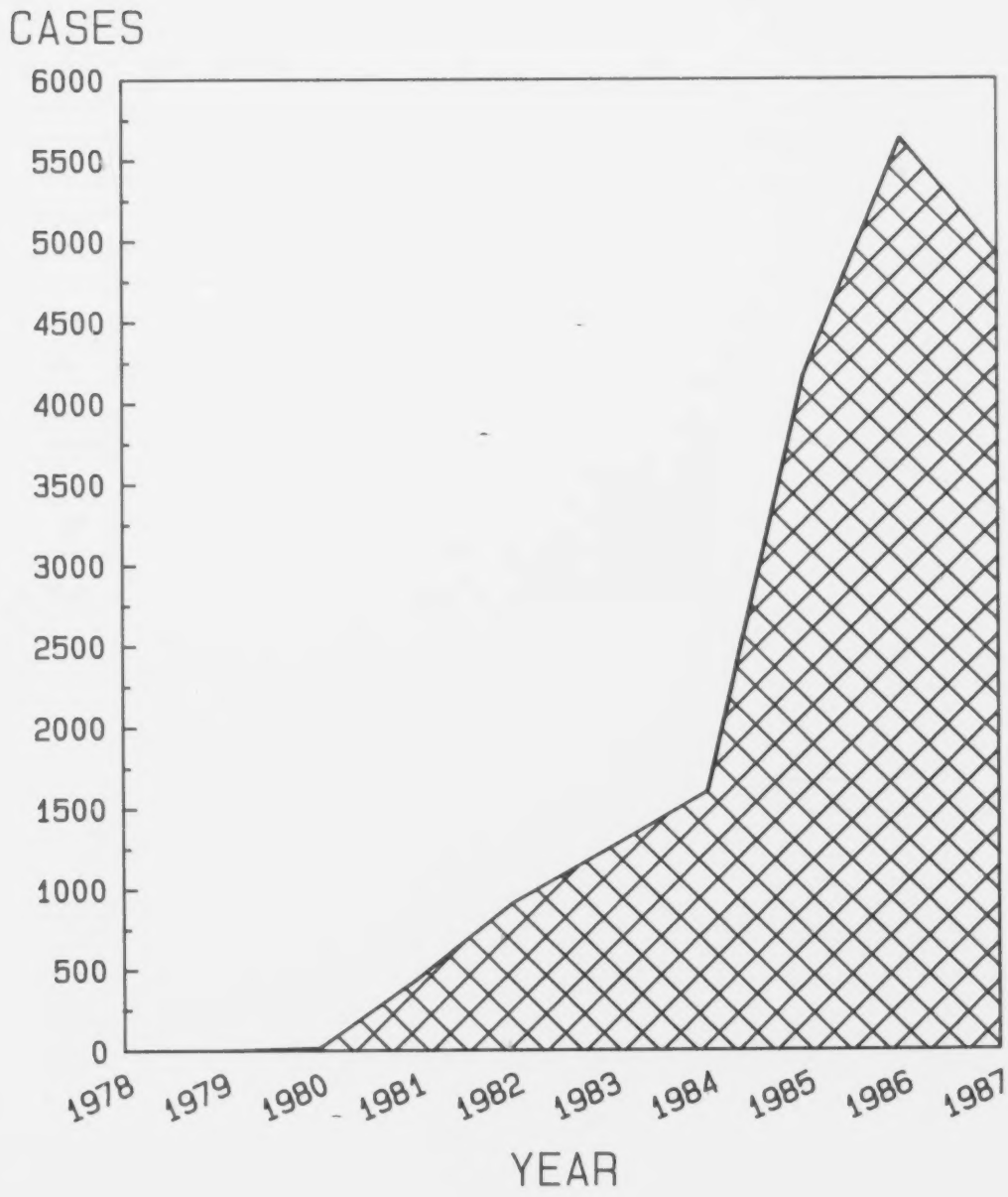


GONORRHEA - PERCENT OF REPORTED CASES BY AGE & RACE, FLORIDA, 1987





PPNG - REPORTED CASES, FLORIDA, 1978-1987

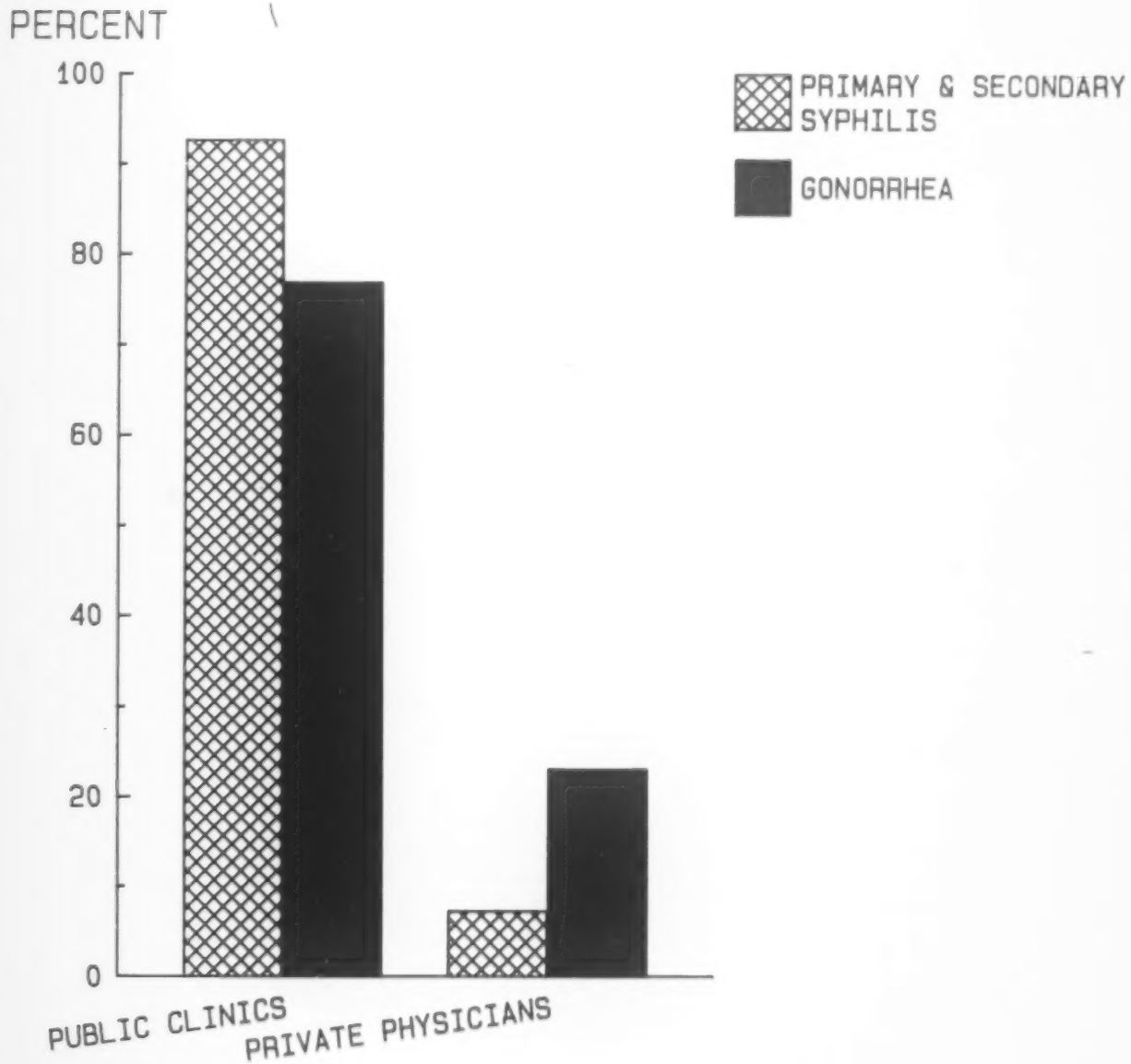


REPORTED SYPHILIS AND GONORRHEA CASES AND RATES PER 100,000 POPULATION, FLORIDA, 1957 - 1987

Year	Population	Total Syphilis		Primary & Secondary		Early Latent		Late & Late Latent		Congenital		Gonorrhea	
		Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
1987	12,112,800	15,666	129.3	7,440	61.4	5,224	43.1	2,892	23.9	110	0.9	62,944	519.6
1986	11,744,900	9,427	80.3	4,344	37.6	3,107	26.9	1,876	16.2	100	0.9	67,443	574.2
1985	11,377,318	7,969	70.0	3,679	32.3	2,504	22.0	1,755	15.4	31	0.27	57,647	506.7
1984	11,015,061	8,314	75.5	3,876	35.2	2,812	25.5	1,596	14.5	30	0.27	51,212	465.0
1983	10,645,793	8,404	79.0	4,179	39.3	2,501	23.5	1,699	16.0	25	0.24	53,370	501.7
1982	10,555,498	7,936	75.2	4,149	39.3	1,884	17.9	1,895	18.0	8	0.08	62,702	595.7
1981	10,108,564	5,971	59.1	3,036	30.0	1,376	13.6	1,552	15.4	7	0.07	60,354	597.0
1980	9,813,706	4,384	44.7	2,257	23.0	1,066	10.9	1,058	10.8	3	0.03	65,437	666.8
1979	9,294,250	4,567	49.1	2,099	22.6	1,297	14.0	1,164	12.5	7	0.08	61,427	660.9
1978	8,966,395	4,648	51.8	1,978	22.1	1,350	15.1	1,315	14.7	5	0.06	60,382	673.4
1977	8,717,334	4,543	52.1	1,828	21.0	1,957	22.4	750	8.6	8	0.1	58,843	675.0
1976	8,551,814	5,528	64.6	2,481	29.0	2,154	25.2	874	10.2	19	0.2	58,921	689.0
1975	8,485,230	6,328	74.6	3,228	38.0	1,981	23.3	1,101	13.0	18	0.2	65,031	766.4
1974	8,248,851	5,518	66.9	2,915	35.3	1,624	19.7	966	11.7	13	0.2	61,507	745.6
1973	7,845,100	4,339	55.3	1,946	24.8	1,227	15.6	1,156	14.7	10	0.1	52,582	670.3
1972	7,441,500	3,692	49.6	1,680	22.6	1,189	16.0	807	10.8	16	0.2	43,688	587.1
1971	7,024,600	3,651	52.0	1,675	23.8	1,156	16.5	781	11.1	39	0.6	30,659	436.5
1970	6,841,500	2,983	43.6	1,398	20.4	990	14.5	567	8.3	28	0.4	24,089	352.1
1969	6,651,400	3,147	47.3	1,368	20.6	868	13.0	889	13.4	22	0.3	18,257	274.5
1968	6,468,700	3,615	55.9	1,595	24.7	898	13.9	1,058	16.3	64	1.0	14,331	221.5
1967	6,287,000	4,378	69.6	1,933	30.7	861	13.7	1,456	23.2	128	2.0	12,563	199.8
1966	6,105,900	5,699	93.3	1,890	30.9	972	15.9	2,692	44.1	145	2.4	10,884	178.3
1965	5,924,700	6,132	103.5	2,356	39.8	1,037	17.5	2,527	42.6	212	3.6	10,803	182.3
1964	5,743,000	5,908	102.9	2,005	34.9	1,011	17.6	2,667	46.6	215	3.8	9,402	163.7
1963	5,560,100	6,945	124.9	1,883	33.8	999	18.0	3,742	67.3	321	5.8	8,867	159.5
1962	5,375,600	6,004	111.7	1,632	30.4	1,505	28.0	2,676	49.8	191	3.5	9,902	165.6
1961	5,188,900	5,324	102.6	1,118	21.6	1,561	30.0	2,493	48.0	152	2.9	10,215	196.9
1960	4,999,000	4,115	82.3	639	12.8	1,047	20.9	2,254	45.1	175	3.5	11,122	222.5
1959	4,790,000	4,332	90.4	344	7.2	916	19.1	2,875	60.0	197	4.1	11,172	233.2
1958	4,571,000	3,186	69.7	201	4.4	741	16.2	2,056	45.0	188	4.1	10,329	240.5
1957	4,245,000	5,514	129.9	213	5.0	1,068	25.2	3,971	93.5	262	6.2	9,725	229.1

* Beginning in 1978 the early latent syphilis category is limited to latent infections under 1 year's duration. The infections over 1 year's duration are now classified as late and late latent.

GONORRHEA & INFECTIOUS SYPHILIS CASES REPORTED BY SOURCE FLORIDA, 1987



SECTION 7:

Summary of Tuberculosis

Prepared by Tuberculosis Control Program
Marianne B. McEuen, M.D., Director

TUBERCULOSIS

Trends

In 1987, Florida ranked 9th highest among the 50 states with a tuberculosis case rate of 13.2 per 100,000. Thus Florida continues to have one of the highest tuberculosis case rates in the United States. There were 1,586 cases of tuberculosis reported in Florida in 1987, representing a 7.3% increase over the 1,478 cases in 1986. This represents a 4.8% increase in the rate per 100,000 population (Table 1). This is the third consecutive year that both the number of tuberculosis cases and the tuberculosis rate have increased. This upward trend in tuberculosis morbidity is predicted to continue as the result of the increasing incidence of AIDS and HIV infection. AIDS and TB surveillance during 1987 in Florida, revealed that 78 (6.6%) of the 1,180 AIDS cases reported during 1987 were also reported as tuberculosis cases during 1987.

Race, Sex, and Age

The race and sex distribution for 1987 shows that the highest number of reported cases occurred among non-white males, age 25-44 (Table 2). Non-white females in that same age group accounted for more than twice the number of cases reported among white females. The case rate per 100,000 in the non-white population was 48.2 while the white population rate

was 7.0 (Table 3). Overall, males accounted for 70.6% of the new cases while females accounted for 28.9% and sex was not stated for 0.5%. Persons under age 25 accounted for 10.7% of the reported cases representing a decrease of 15.1% from the 12.6% reported for this age group in 1986. The 65+ age group which accounted for 19.4% of the cases in 1987 also decreased 13.8% from the 22.5% reported in 1986. These two age group decreases in 1987 were offset by a 13.9% increase in the percent of cases (39.3) reported for the 25-44 age group (Figure 1).

Case rates vary widely according to age, race and sex. The rate of 160.7 for non-white males age 45-64 is highest and contrasts to the rate of 3.2 for white females of the same age group. For all persons the case rate is highest between age 45 and 64 years old (Figure 2). With the exception of the non-white females ages 5-24, the rate for non-white males is highest, non-white females next highest, followed in order by white males and white females (Table 3).

Bacteriologic Confirmation

Bacteriologic results were available at the time of reporting for 1,545 (97.4%) of the 1,586 cases reported in 1987. 1,462 cases (92.2%) were reported with positive culture and 83 (5.2%) were negative. Bacteriologic results were not available for 41 cases (2.6%) (Figure 3).

Site of Disease

Pulmonary tuberculosis was reported for 1,367 (86.2%) of the cases during 1987. Extra-pulmonary tuberculosis accounted for 219 (13.8%) of the total cases reported (Table 4). From 1977-1987 reported pulmonary tuberculosis cases decreased 8.2% from 1,489 to 1,367 (Figure 4), however, extra-pulmonary tuberculosis cases increased 55.3% from 141 to 219.

Tuberculosis Associated with AIDS

Figure 5 shows the 287 AIDS/TB cases by year of tuberculosis report. The number of such cases increased over time from 1 or 2 cases in 1978-1980 to 84 cases in 1987. Of the 3,639 AIDS cases reported through 1987 in Florida, 7.98% have also been diagnosed as having tuberculosis. Because of the interval between the tuberculosis case report and AIDS diagnosis it is estimated that an additional 2 to 3 percent of the AIDS cases reported through 1987 will develop tuberculosis during the following year.

The fact that 7.9% of AIDS patients in Florida have had tuberculosis suggests that the immunosuppression caused by human immunodeficiency virus (HIV) infection results in the progression of tuberculosis from latent infection to disease.

In addition to the high rate of tuberculosis in confirmed AIDS cases, the rate of tuberculosis in HIV infected, but not AIDS confirmed, is estimated to be extremely high. For example, in Dade County, more than 21% (91/431) of patients diagnosed with active tuberculosis between October 1, 1985 and October 31, 1987 were infected with HIV. Before the advent of AIDS, tuberculosis in Florida showed a steady annual decline in case rate. For the three years prior to 1985 the rate declined an average of 6.5% per year. In 1985 tuberculosis rate increased 2.5%, in 1986 it increased 1.6%, and in 1987 it increased 4.8%.

Geographic Distribution

Tuberculosis case rates for 1987 by HRS District ranged from 21.7 in District XI to 7.1 in District I. The rate increased in 31 counties and decreased in 32 counties. Ten counties reported no cases during 1987. Of these ten counties, four (Baker, Gilchrist, Liberty and Walton also reported no cases in 1986 (Table 5, Figure 6).

In 1987 as in 1985 and 1986, the majority (70.6%) of new cases were reported from eight counties with metropolitan cities (Dade, Hillsborough, Broward, Palm Beach, Duval, Polk, Orange and Pinellas counties). These eight counties reported 1,120 of the 1,586 cases reported during the year. Of these eight counties, Dade and Hillsborough were among the 10 Florida counties having the highest case rate per 100,000 population. Eighteen counties had case rates above the state average of 13.2 and 39 counties recorded tes less than 13.2 per 100,000 (Table 5).

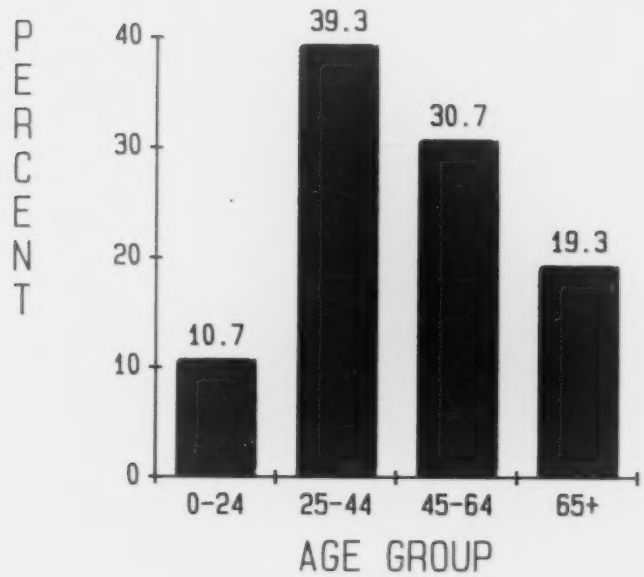
TABLE 1

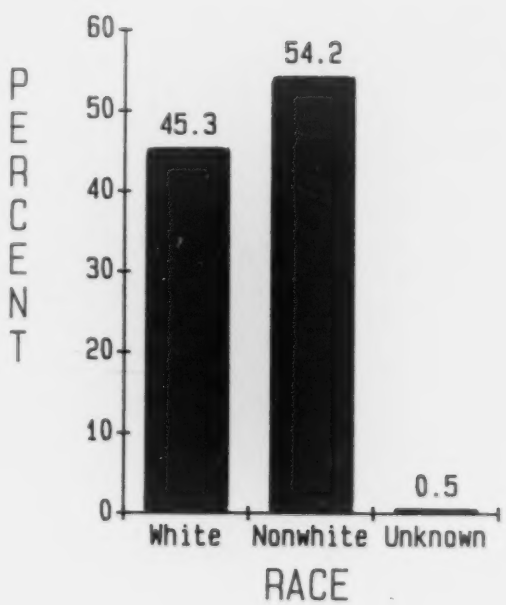
TUBERCULOSIS - Reported Cases and Rates per 100,000 Population, United States and Florida, 1975-1987

YEAR	United States				Florida			
			Percent Change				Percent Change	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1975	33,989	15.9	----	----	1,758	21.0	----	----
1976	32,105	15.0	-5.5	-5.7	1,630	19.4	-7.3	-7.6
1977	30,145	13.9	-6.1	-7.3	1,674	19.8	+2.6	+2.0
1978	28,521	13.1	-5.4	-5.8	1,724	20.1	+2.9	+1.5
1979	27,669	12.6	-3.0	-3.0	1,628	18.4	-5.6	-8.5
1980	27,749	12.3	+0.3	-2.4	1,647	16.9	+1.2	-8.2
1981	27,373	11.9	-1.4	-3.3	1,553	15.3	-5.7	-9.5
1982	25,728	11.1	-6.1	-6.7	1,467	13.9	-5.5	-9.2
1983	23,846	10.2	-6.6	-8.1	1,457	13.9	-0.7	-0.9
1984	22,255	9.4	-9.0	-7.8	1,335	12.2	-8.4	-1.0
1985	22,201	9.3	-0.2	-1.1	1,425	12.5	+6.7	+2.5
1986	22,768	9.4	+2.6	+1.1	1,478	12.7	+3.6	+1.6
1987	22,517	9.3	-1.1	-1.1	1,586	13.2	+7.3	+4.8

FIGURE 1

TUBERCULOSIS - REPORTED CASES BY AGE, RACE AND SEX, FLORIDA, 1987





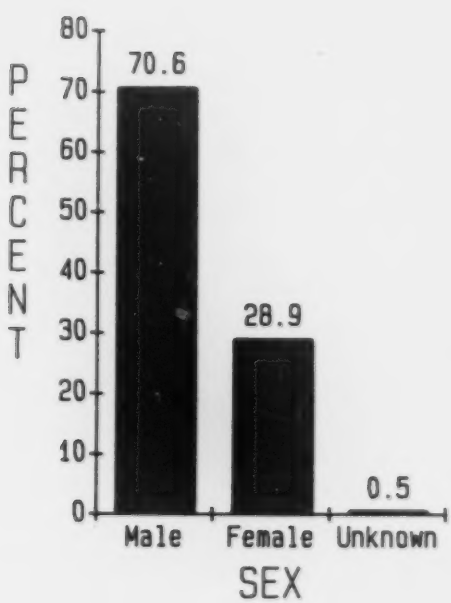


TABLE 2

TUBERCULOSIS - Reported Cases By Age, Race and Sex, Florida, 1987

AGE	Total	WHITE			NON-WHITE			RACE & SEX UNKNOWN
		Total	Male	Female	Total	Male	Female	Total
0-4	29	11	6	5	18	12	6	0
5-14	16	5	5	0	11	5	6	0
15-24	124	33	19	14	90	42	48	1
25-44	623	212	160	52	407	278	129	4
45-64	487	248	210	38	238	186	52	1
65+	307	209	129	80	95	67	28	3
All Ages	1,586	718	529	189	859	590	269	9

FIGURE 2

TUBERCULOSIS - Reported Case Rates By Age Groups, Florida, 1987

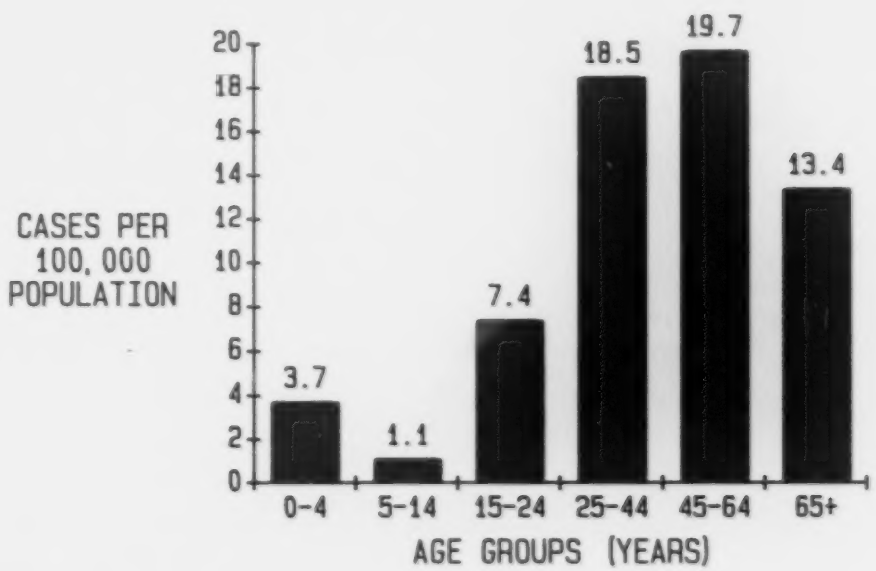


TABLE 3

TUBERCULOSIS - Reported Case Rates Per 100,000 Population By Age, Race and Sex, Florida, 1987

AGE	TOTAL	WHITE			NON-WHITE		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
0-4	3.7	1.8	2.0	1.7	9.2	12.0	6.2
5-14	1.1	0.4	0.9	0.0	3.4	3.0	3.7
15-24	7.4	2.4	2.7	2.1	27.6	26.1	29.1
25-44	18.5	7.5	11.3	3.7	75.9	110.8	45.2
45-64	19.7	11.2	20.4	3.2	92.4	160.7	36.6
65+	13.4	9.7	13.9	6.5	67.5	117.4	33.5
All Ages	13.2	7.0	10.7	3.6	48.2	69.4	28.9

FIGURE 3

TUBERCULOSIS - Reported Cases By Bacteriological Status At Time Of Report, Florida, 1987

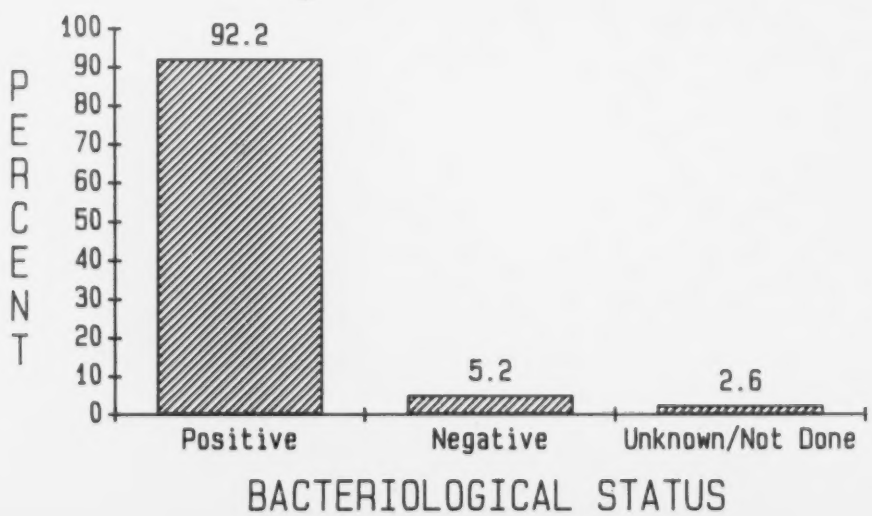


TABLE 4

TUBERCULOSIS - Reported Cases and Percent by Site of Disease, Florida, 1987

Disease Site	Reported Cases	
	Number	Percent
Pulmonary	1,367	86.2
Extra-Pulmonary		
Pleural	48	
Lymphatic	57	
Bone and/or Joint	25	
Genitourinary	21	
Miliary	17	
Meningeal	14	
Peritoneal	6	
Other	31	
Total Extra-Pulmonary	219	13.8
Total All Cases	1,586	100.0

FIGURE 4 - NUMBER OF REPORTED PULMONARY AND EXTRA-PULMONARY TUBERCULOSIS CASES, FLORIDA, 1978-1987

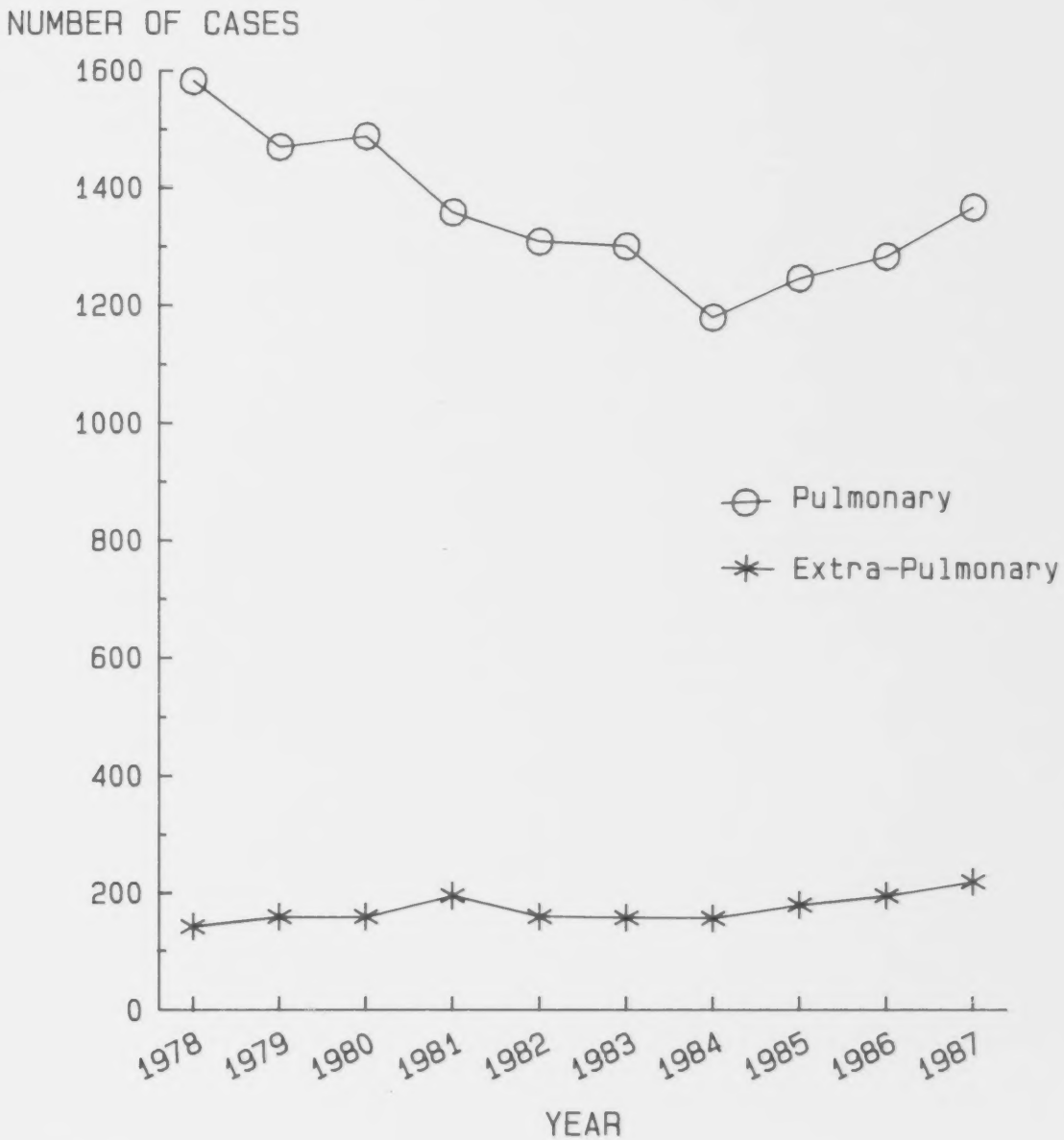


FIGURE 5 - REPORTED TUBERCULOSIS CASES WHO HAVE ALSO HAD AIDS, BY YEAR OF TUBERCULOSIS REPORT, FLORIDA, 1978-1987 (N=287)

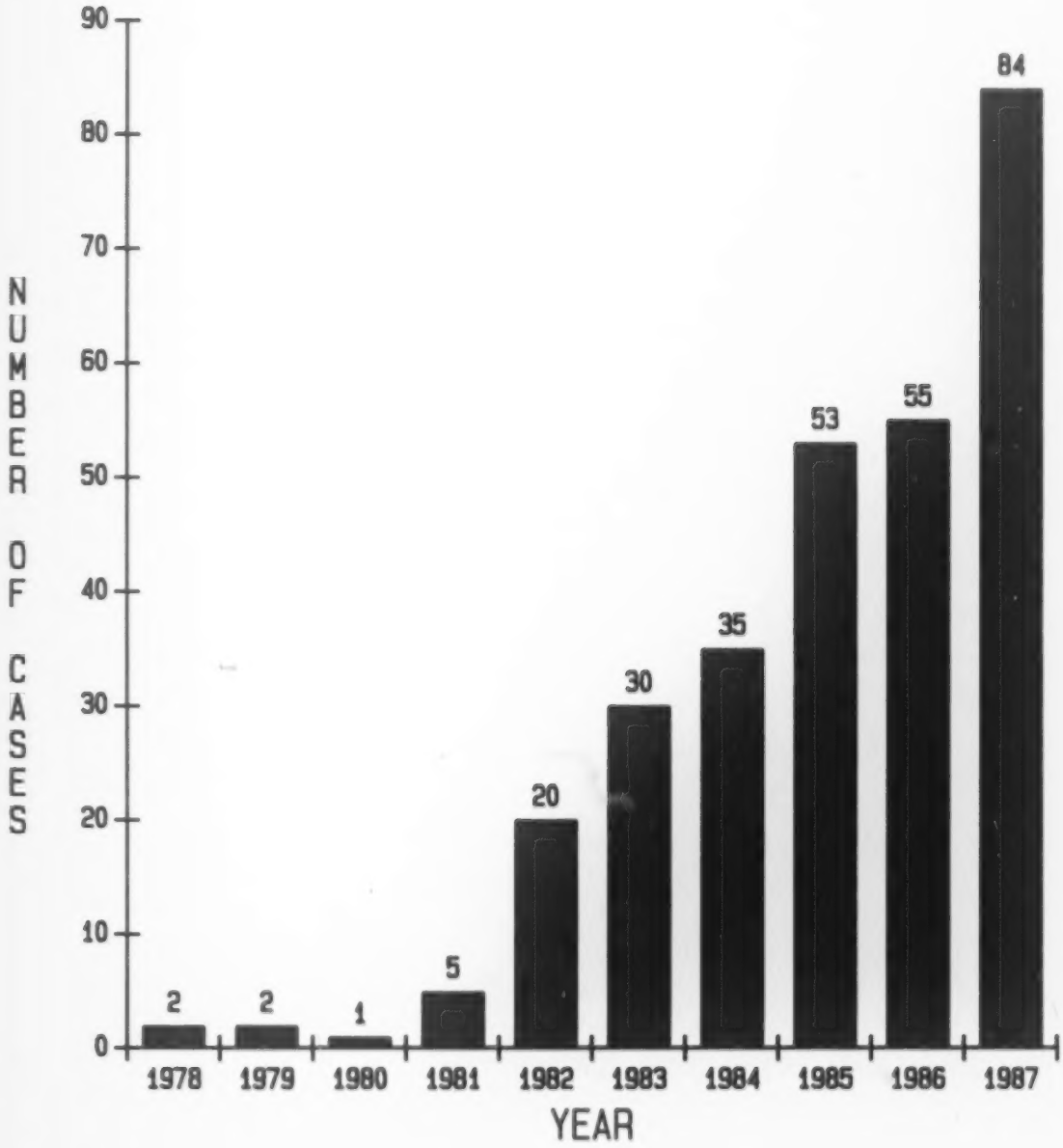


TABLE 5

*TUBERCULOSIS - Reported Cases and Rates Per 100,000 Population, By Rank, By County, Florida, 1987

County	Number of Cases	Rate Per 100,000 Population	Rank
District I			
Escambia	21	7.5	44
Okaloosa	10	6.7	47
Santa Rosa	6	9.1	34
Walton	0	0.0	57
District II			
Bay	18	13.9	18
Calhoun	0	0.0	57
Franklin	2	23.4	6
Gadsden	8	17.3	13
Gulf	1	8.3	38
Holmes	1	6.1	49
Jackson	2	4.6	54
Jefferson	2	16.8	14
Leon	16	9.1	32
Liberty	0	0.0	57
Madison	5	31.5	3
Taylor	4	21.3	9
Wakulla	0	0.0	57
Washington	2	12.9	19
District III			
Alachua	13	7.2	45
Bradford	0	0.0	57
Citrus	4	4.9	52
Columbia	2	4.8	53
Dixie	0	0.0	57
Gilchrist	0	0.0	57
Hamilton	1	10.7	27
Hernando	5	6.3	48
Lafayette	0	0.0	57
Lake	14	10.2	29
Levy	2	8.4	37
Marion	17	9.7	30
Putnam	7	11.2	24
Sumter	2	6.8	46
Suwannee	1	3.8	55
Union	3	28.0	5
District IV			
Baker	0	0.0	57
Clay	2	2.1	56
Duval	72	10.8	26
Flagler	4	20.8	10
Nassau	2	4.5	54
St. Johns	8	10.6	28
Volusia	25	7.6	42
District V			
Pasco	22	8.6	36
Pinellas	62	7.5	43
District VI			
Hardee	7	31.7	2
Highlands	6	9.4	31
Hillsborough	182	22.7	7
Manatee	20	11.0	25
Polk	68	17.5	11
District VII			
Brevard	20	5.4	51
Orange	85	14.1	17
Osceola	11	12.6	20
Seminole	15	5.9	50
District VIII			
Charlotte	8	9.1	33
Collier	22	17.4	12
DeSoto	8	34.9	1
Glades	0	0.0	57
Hendry	2	8.1	40
Lee	23	7.8	41
Sarasota	22	8.8	35
District IX			
Indian River	10	12.0	22
Martin	11	12.4	21
Okeechobee	4	14.4	15
Palm Beach	112	14.2	16
St. Lucie	39	30.4	4
District X			
Broward	138	11.7	23
District XI			
Dade	401	22.2	8
Monroe	6	8.1	39
STATE TOTAL	1586	13.2	--

FIGURE 6

TUBERCULOSIS - Reported Cases and Case Rates Per 100,000 Population, By HRS Districts, Florida, 1987

This publication was produced by the HRS Communicable Disease/Epidemiology Program at an annual cost of $2,442.00, or $4.44 per copy, to inform the public about communicable disease morbidity statistics in Florida, in accordance with Chapter 381, F.S. HRS complies with the state and federal nondiscrimination policies relating to race, sex, age and handicapping conditions.